DRAFT

LEMHI RESOURCE MANAGEMENT PLAN
AND
ENVIRONMENTAL IMPACT STATEMENT

Prepared by
Department of the Interior
Bureau of Land Management
Salmon District

Delmar D. Vail

Idaho State Director, Bureau of Land Management

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PART I

RESOURCE MANAGEMENT PLAN

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DRAFT RESOURCE MANAGEMENT PLAN

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INTRODUCTION

This document is divided into three parts. Part I is the draft resource management plan (RMP). The draft plan is described in the Proposed Management Prescription section and includes both management objectives and required management actions. The rationale behind the Selection of the Preferred Alternative is also outlined.

Part II of this document is the draft environmental impact statement (DEIS). The DEIS is prepared as part of the resource management planning process to assess the potential environmental impacts of the plan alternatives. The plan alternatives are described in Chapter 2 of the DEIS.

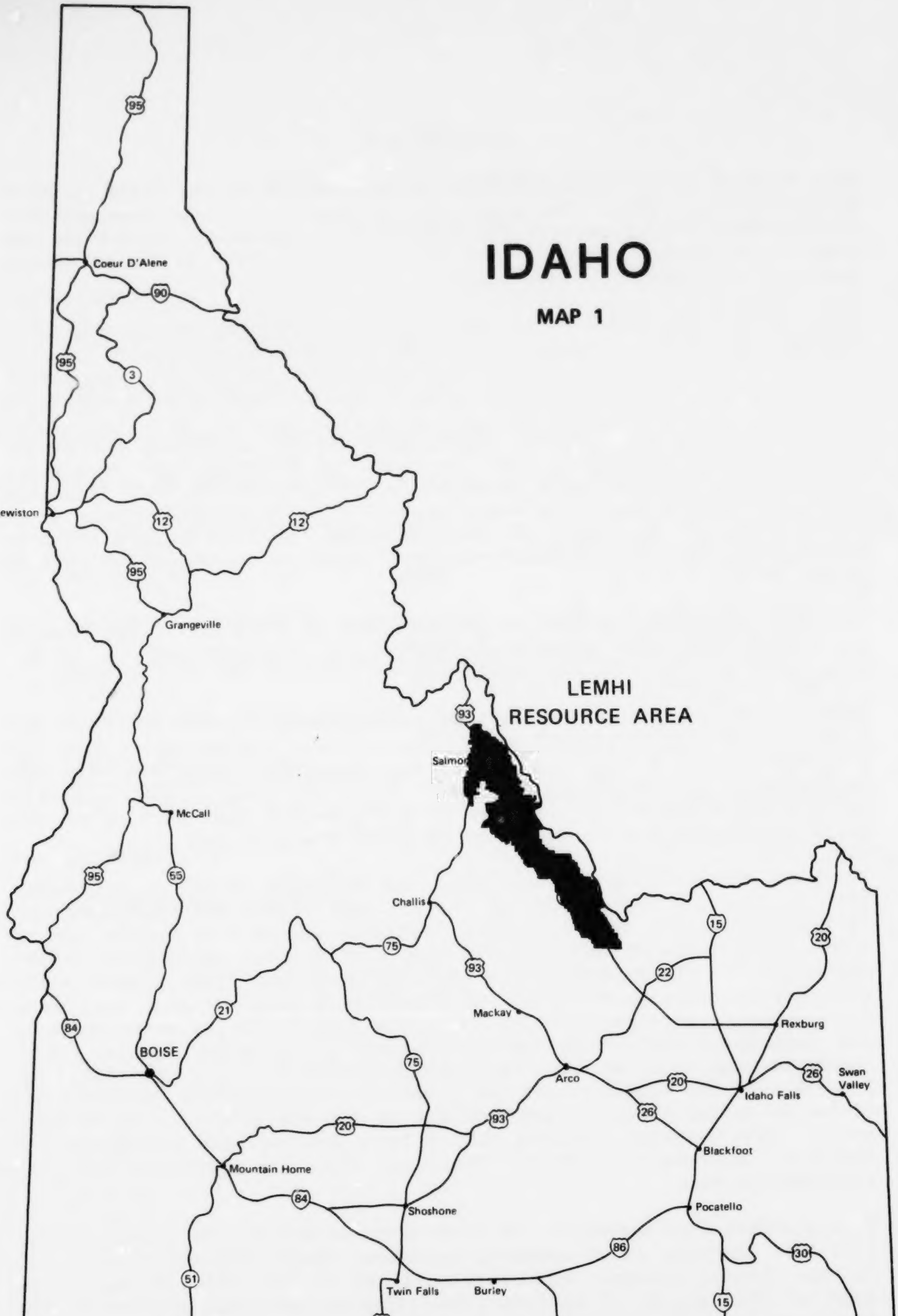
Alternative F is the Preferred Alternative and is, as pointed out above, the same as the draft plan (Part I). No final decisions have been made, however, and any of the alternatives could be selected. The resource management plan proposed for final approval will be formulated only after public review of the draft. The final proposed plan will be identified in the final environmental impact statement, which is scheduled for release in May, 1986.

Part III, Appendix, consists of specific data on which Part I and Part II are based. Even more detailed information is available and can be inspected at the Salmon District Office.

A portion of the Ellis Planning Unit (Approximately 40,000 Acres) is now a part of the Lemhi Resource Area. The entire Ellis-Pahsimeroi area was recently covered by the Ellis-Pahsimeroi Management Framework Plan and Environmental Impact Statement (1982). Since that plan is still current, we have not analyzed or developed a new plan for that portion of the Ellis Planning Unit which is now in the Lemhi Resource Area.

The Lemhi RMP is being prepared under the authority of and in accordance with Sections 201 and 202 of the Federal Land Policy and Management Act of 1976 (Public Law 94-579, FLPMA). Further, pursuant to Section 603 of FLPMA, this document analyzes preliminary wilderness suitability recommendations for the Eighteenmile Wilderness Study Area (WSA) located within the planning area boundary. For this WSA, this document will make only preliminary recommendations as to its suitability or nonsuitability for inclusion into the National Wilderness Preservation System. This recommendation will be reported through the Director of the BLM, the Secretary of the Interior, and the President to Congress. The final decision on suitability or nonsuitability of the WSA will be made by Congress. This document contains only a draft proposal for wilderness. A separate Environmental Impact Statement will be prepared for the Eighteenmile WSA.

This document also serves as the instrument to satisfy the intent of the 1975 U.S. District Court approved agreement (Case 1983-73) between BLM and the Natural Resource Defense Council, et al. in which BLM agreed to consider the impacts of various intensities of livestock grazing in its decision-making process. Livestock grazing has been identified as one of the planning issues. This issue is addressed in the land use plan and considered in the EIS.


IDAHO
MAP 1
LEMHI
RESOURCE AREA
Coeur D'Alene
Lewiston
Grangeville
McCall
Salmon
Challis
Mackay
Arco
Rexburg
Idaho Falls
Swan Valley
Blackfoot
Pocatello
BOISE
Mountain Home
Shoshone
Twin Falls
Burley
95
90
3
12
55
21
84
75
93
22
15
20
26
86
30
51

GENERAL LOCATION MAP

DESCRIPTION OF THE PLANNING AREA

The Lemhi Resource Area is located in south-central Idaho and encompasses 459,566 acres of public land (see location map). The area includes the lands surrounding the town of Salmon in the northern end of the Salmon District and then stretches to the southeast along the Lemhi River Valley and the upper reaches of Birch Creek, joining the Idaho Falls District at the Clark County line. The Lemhi and Salmon rivers run through the area. The Salmon River provides recreational use such as fishing, boating and camping. The Lemhi River is essentially all on private land.

Elevation varies from 4,000 feet at Salmon to 11,000 feet along the Montana line. The climate varies from semi-arid to sub-humid. Precipitation varies from 9 inches at Salmon to 22 inches at higher elevations and occurs mostly during winter and spring.

Most of the public lands are dry grazing lands. These dry grazing lands are for the most part marginal for agricultural development and are left over from Homestead Act and Desert Land Act settlement. Livestock use the public land during spring, summer, and fall.

The total population in the area is about 6,000. The area's largest communities are Salmon (population 3,303) and Leadore (population 114). During the summer months Salmon and Lemhi County experience a noticeable population increase. Summer homes; government, timber and recreation jobs; and recreation use results in a large influx of people.

Agriculture and agriculture related industries provide the base for the local economy. Agriculture is mainly livestock grazing. Beef cattle numbers remain relatively constant in Lemhi County, fluctuating between 30,000 to 32,000 brood cows. Also contributing to the economy are recreational activities such as hunting, fishing, camping, river floating, and off-road vehicle use.

PLANNING PROCESS

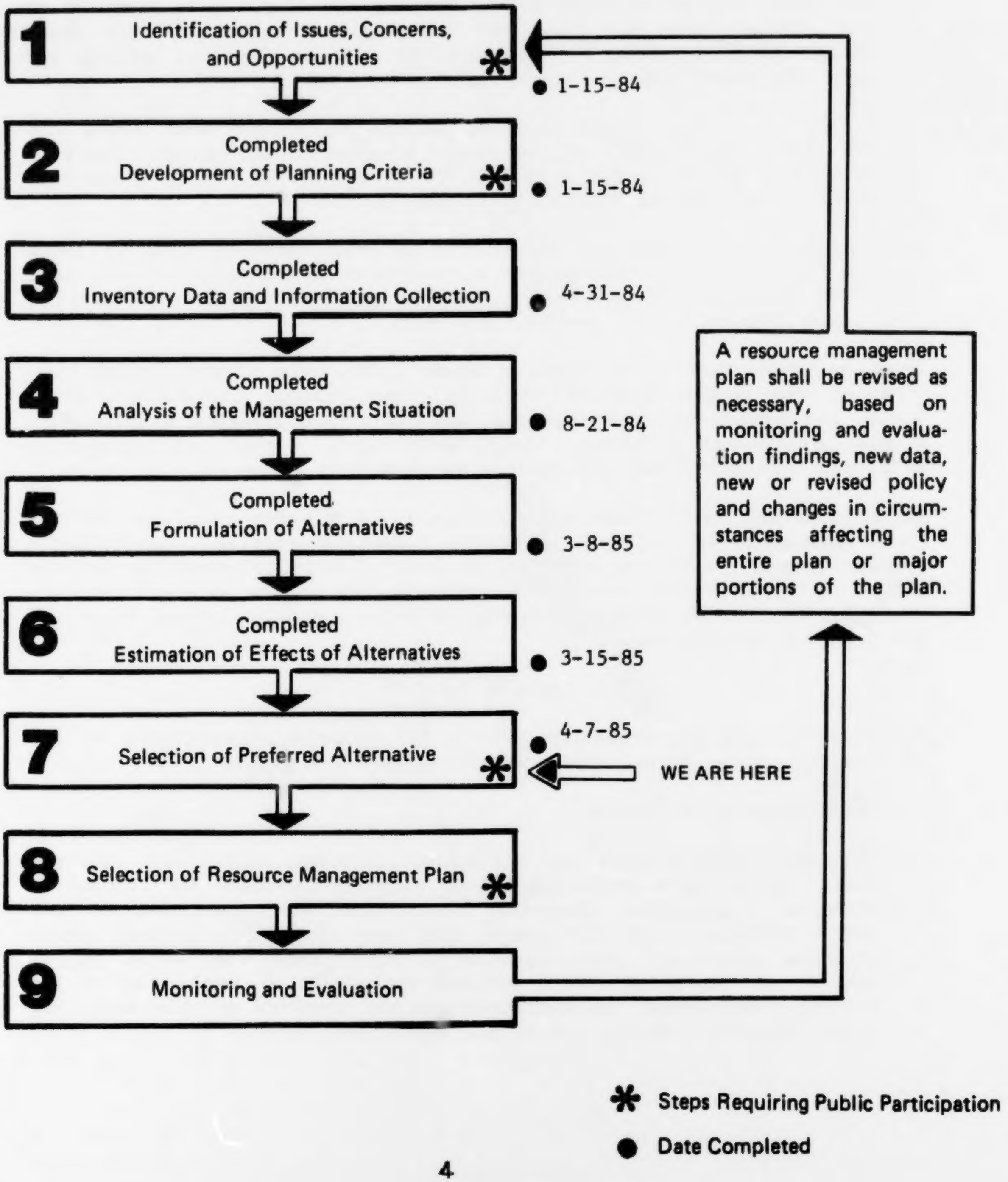
The planning process described in the BLM Planning Regulations 43 CFR 1600 contains nine steps. These are illustrated in Figure 1.

1. Identification of Issues

   Each BLM resource area has different problems, needs, and resource uses. At the very beginning of the planning process, BLM listens to citizens' suggestions regarding development and protection of the area's resources. At this stage, BLM needs the public to help determine the issues and their importance. These issues then become important to the planning effort and are considered in each step of the process. The issues and conflicts are not resolved at this step, but it is important for the BLM to hear specific comments.

Figure 1

STEPS IN THE RESOURCE MANAGEMENT PLANNING PROCESS


1 Identification of Issues, Concerns, and Opportunities *
● 1-15-84
2 Completed Development of Planning Criteria *
● 1-15-84
3 Completed Inventory Data and Information Collection
● 4-31-84
4 Completed Analysis of the Management Situation
● 8-21-84
5 Completed Formulation of Alternatives
● 3-8-85
6 Completed Estimation of Effects of Alternatives
● 3-15-85
7 Selection of Preferred Alternative *
● 4-7-85
WE ARE HERE
8 Selection of Resource Management Plan *
9 Monitoring and Evaluation
A resource management plan shall be revised as necessary, based on monitoring and evaluation findings, new data, new or revised policy and changes in circumstances affecting the entire plan or major portions of the plan.
* Steps Requiring Public Participation
● Date Completed

2. Development of Planning Criteria

Once the issues have been identified, the District Manager prepares criteria to guide development of the plan. These criteria are used to guide the gathering of information and, later, to formulate and evaluate alternatives. The criteria are published for public comment before they are adopted by the District Manager.

3. Inventory and Information Collection

The BLM planning team needs to know the present condition of the resources in the area and their past production levels. The District Manager arranges for the district staff to collect and assemble this information. BLM appreciates public contributions of information.

4. Analysis of the Management Situation

The planning team assesses the capability of the public land resources to respond to the needs, concerns, and opportunities previously identified through public participation. BLM policy and the policies, plans, and programs of other federal agencies, state and local governments, and Indian tribes also play a role in this analysis. The Analysis of the Management Situation for the Lemhi Planning Area is located in the Salmon District Office.

5. Formulation of the Alternatives

Several alternative plans are prepared that range from emphasizing production of resources to favoring protection of resources, including continuation of present management. Each alternative must be a complete plan for managing the resources in the planning area. Public comments help identify conflicts among the alternatives.

6. Effects of the Alternatives

The BLM interdisciplinary team analyzes the physical, biological, economic, and social effects of implementing each alternative. The relationship between short-term uses of the environment and long-term productivity must be analyzed during this step.

7. Selection of a Preferred Alternative

Alternatives and their effects are evaluated according to the planning criteria developed in Step 2. The District Manager then selects a preferred alternative based on information and analysis developed up to this point in the planning process. This alternative is included in the draft plan and draft environmental impact statement that are presented to the public. It is important for the public to participate in the review and comment period at this time. This draft RMP/EIS identifies BLM's preferred alternative.

8. Selection of the Resource Management Plan

After evaluation of comments received on the draft plan and draft environmental impact statement, the District Manager selects a proposed Resource Management Plan. If the proposed plan is not within the range of the alternatives in the draft plan and the environmental effects are significantly different, a new draft plan must be prepared. After review and concurrence, including a review by the Governor for consistency with state or local plans, policies, or programs, the BLM State Director approves the final plan and environmental impact statement.

9. Monitoring and Evaluation

Once the plan is approved by the State Director, it is then time to begin carrying it out. Review of the plan is ongoing and revisions are made as needed. The ongoing review determines if mitigating measures are effective; if environmental limits have been exceeded; if other federal, state, or local plans have changed; or whether there is new data significant to the plan. Monitoring studies begin as soon as possible and are used, along with initial inventory data, to sustain or modify livestock use adjustments. Studies are conducted on a recurring basis. Monitoring and evaluation reports are available for public review.

10. Maintenance, Amendment, and Revision

Resource management plans are updated to reflect minor changes in data and further refinement or documentation of the approved plan. Maintenance does not result in expansion of the scope of resource use or restrictions or in changes in the terms, conditions, or decisions of the approved plan. Maintenance does not require formal public involvement, interagency coordination, or the preparation of environmental analysis documents.

When changes are required that go beyond routine maintenance, the RMP must be amended in accordance with the BLM planning regulations. Amendments must include the environmental analysis process to determine environmental impacts, public involvement, interagency coordination, and consistency determinations as required by the regulations.

When changing conditions (e.g., major improvements or declines in forage condition) affect all or major portions of the plan, then the plan must be revised, using the regulations required for the preparation of a new plan.

PLANNING ISSUES, SCOPING, AND PLANNING CRITERIA

Issue-Driven Planning and Scoping

The BLM planning regulations generally equate land use planning with problem solving or with issue resolution. An issue may be defined as an opportunity, conflict, or problem regarding the use or management of public lands and resources. Not all issues can be resolved through land use planning. They may instead require changes in policy, budgets or legislation.

Scoping

The Lemhi Resource Management Plan (RMP) addresses public issues and management concerns related to public land management in the planning area. An initial list of issues and concerns was developed by the resource area staff. This list was submitted to the Multiple Use Advisory Council and the Grazing Advisory Board. It was also published in the local newspaper and mailed to all other known interested parties. Comments were solicited from all of these parties as well as from a variety of informal public contacts. From this initial list of issues and public comments, similar items were combined and agency management concerns were incorporated to avoid duplication. The result was nine planning issues that the Lemhi RMP will address. These nine issues have been used to establish the scope of this RMP.

It is important to understand that issues brought to BLM's attention by the public involve value judgements or personal preferences. This frequently results in differing or opposing views of public land management. These different ways of looking at public land management are reflected in the various alternatives, which are described and analyzed later in this document.

Some of the issues identified by the public were not considered in the RMP. These are issues that do not require a land use decision. These issues may be handled through routine administrative channels. An example of an issue that was brought to BLM's attention and will not be included in this RMP is that "trespass land uses should be identified". Resolution of this issue involves an administrative decision, adequate funding, and commitment of manpower.

All public input relative to the Lemhi RMP has been documented and filed. It is available for examination at the Bureau's Salmon District Office, Lemhi Resource Area.

Planning Criteria

Planning criteria are the factors or data that BLM must consider prior to arriving at a land use decision relative to any issue. The following are the factors that have been used in arriving at decisions in the RMP.

A. Social and economic values

B. Plans, programs, and policies of other federal agencies, state and local governments, and Indian tribes

C. Existing law, regulations, and BLM policy

D. Future needs and demand for existing or potential resource commodities and values

E. Public input

F. Public welfare and safety

G. Past and present use of public and adjacent lands

H. Public benefits of providing goods and services in relation to costs

I. Quantity and quality of noncommodity resource values

J. Environmental impacts

Issues Addressed in the Lemhi RMP

Nine issues are addressed in this document. These issues were identified based on planning team members' judgement, interagency consultation, public input, and review by BLM managers.

The following discussions present a brief overview of the issues included in the alternatives. The alternatives are found in Part II, Chapter 2 and analyzed in Part II, Chapter 4.

1. Land Tenure Adjustment

The Issue

How should disposal or retention of public lands be managed?

Background

Land patterns in the Lemhi Area are such that public and private lands are interspersed, resulting in access and management problems. In addition, there is a need to review the public lands for agricultural development and community expansion. The transfer of public lands to private ownership could reduce natural wildlife habitat, reduce acreage available for livestock grazing, and affect recreational uses on the public lands. Administrative efficiency could be improved by disposing of unmanageable parcels of public land.

Criteria

Public land disposals involving either public sale or exchange must meet the criteria in Sections 203 and 206 of the Federal Land Policy and Management Act.

In accordance with Section 102(a)(1) of the Federal Land Policy and Management Act, "The public lands shall be retained in Federal ownership, unless as a result of the land use planning...it is determined that disposal of a particular parcel will serve the national interest...."

Lands falling within any of the following criteria will not be considered for disposal.

a. Public lands having value for mineral and energy production, except as provided for under Section 209 of FLPMA and the 1872 mining laws

b. Public lands providing habitat essential to the continued survival of threatened or endangered species

c. National Register Sites or sites that have been formally proposed for inclusion on the National Register (and sites that may be eligible for the National Register, except that they may be transferred to another agency for management as National Register Sites)

d. Congressional designations or areas being considered for Congressional designation, such as:

    (1) Wilderness study areas and designated wilderness areas

    (2) National Conservation areas

    (3) Wild and Scenic Rivers, Study Rivers, or those recommended for study for inclusion

    (4) National or Historic Trails Systems

e. Large well-blocked areas of public land

f. Administrative designations and agreements (except that such designations and agreements may be reconsidered during the planning process) such as:

    (1) Developed recreation sites

    (2) Administration sites

    (3) Stock driveways

2. Energy and Minerals Management

The Issue

a. How will energy and mineral resource development be accommodated?

b. What public land, if any, should be withdrawn from energy and mineral exploration and/or development in order to protect surface and ground water quality, visual quality, wildlife habitat, and other resource values?

Background

The area contains many energy and mineral resources. Exploration and development has been primarily for metallic minerals and coal since the mid-1800's. In more recent years, exploration and development has expanded to other mineral resources including gypsum, phosphates, thorium, oil, gas, and geothermal. These commodities are important to both the local and national economics.

Criteria

BLM will manage geological, energy, and mineral resources on the public lands. Generally, the public lands are available for exploration and development, subject to applicable regulations and federal and state laws. Geological resources, however, will be managed so that significant scientific, recreational, wildlife, and educational values will be maintained or enhanced.

Areas will be identified where there are major conflicts between energy leasing and other resources. Generally, when these conflicts occur, special studies will be completed to develop protective stipulations (such as seasonal closures) or mitigating measures which would be tailored to the specific conditions and resources affected. These stipulations would be designed to eliminate, or reduce adverse impacts to the resources in conflict with energy leasing. Where adverse impacts to critical resources cannot be adequately mitigated, leasing will be allowed only with a "no surface occupancy" stipulation.

3. Forest Management

The Issue

a. What forest lands are available for intensive forest management?

b. What forest lands should be subject to restricted forest management to protect high recreation, watershed, and wildlife values?

Background

Areas of concern include the McDevitt, Agency, Cow-Yearian Creeks, and Perk Canyon drainages. Wildlife, watershed, and recreation values could be adversely affected by timber harvesting in these areas. However, timber harvesting is a source of income and employment for Lemhi County. The timber cut on BLM-administered lands is currently about 10 percent of the timber cut in Lemhi County.

Criteria

Generally, lands containing commercial timber or other forest products such as firewood, posts and poles, and Christmas trees are available for harvest except where expressly closed by law or regulation. Some areas may also be subject to special restrictions to protect other resource values. All Timber Production Capability Classifications will be reevaluated relative to current BLM Forest Land Policy.

4. Livestock Grazing Management

The Issue

a. How should the range resource be managed to meet existing and future livestock demand?

b. How much and where should forage be designated for livestock and wildlife use?

c. What special management techniques should be initiated on livestock grazing to improve sensitive areas?

Background

Continuation of past and present livestock management practices concerns many people. Adjustments of livestock grazing, including potential reduction in grazing could reduce the income and disrupt the lifestyles of the ranchers involved, their families, and communities.

Thirty percent of the resource area is in fair and poor ecological condition; the other 70 percent is in good ecological condition. Most of the fair and poor condition range is on the lower elevation range, which is the first part of the allotment used by livestock in the spring. One percent of the resource area has highly erosive soils in fair condition.

Areas of concern are riparian areas such as the McDevitt Creek, Basin Creek, and Pattee Creek drainages, where livestock and wildlife compete for forage and space. Livestock use levels and season of use are the main concerns in these areas.

Criteria

The following factors are to be considered in setting livestock use levels and establishing basic management:

a. The economic stability of the local livestock industry in Lemhi County must be considered.

b. Plant vigor maintenance requirements, as well as watershed and riparian area protection and stability requirements, must be met.

c. The Bureau will provide habitat, including forage, for wildlife on public land. The amount of forage provided is determined by BLM through consultation with the Idaho Department of Fish and Game and public land users.

5. Wildlife Habitat Management

The Issue

a. How should fisheries habitat and seasonal range for big game and sage grouse be managed?

b. How should disposal of public lands containing important wildlife habitat be handled?

c. How should habitat for threatened and endangered species be managed?

Background

The Lemhi Resource Area contains a rich diversity of aquatic and terrestrial wildlife habitat. Hunting and fishing are extremely important to the local economy. Wildlife populations can be threatened when habitat is used for livestock grazing, timber harvesting, or other uses. These land use activities, however, are important to the people of Lemhi County as a source of jobs and income.

Criteria

BLM will manage fish and wildlife habitat on the public lands. A variety of methods may be employed, including the use of management actions designed to maintain or improve wildlife habitat, inclusion of stipulations or conditions in BLM leases, granting of licenses and permits, and development of detailed plans for fish and wildlife habitat management. Priority will be given to threatened or endangered species habitat. All BLM management actions will comply with federal and state laws concerning fish and wildlife.

6. Watershed

The Issue

a. How should BLM deal with riparian area degradation due to livestock grazing?

b. How should BLM address water quality and fisheries habitat degradation due to forestry practices?

c. How should the problem of early spring turnout and overgrazing by livestock on highly erosive, low elevation rangeland be handled?

Background

Areas of concern include most riparian areas within the Lemhi Resource Area and low elevation ranges typically dominated by highly erosive soils. These areas are the first impacted by livestock each grazing season or are the most susceptible to damage.

Reductions in water quality and fisheries habitat as a result of logging practices and roading is a problem within watersheds having a commercial forest base. Lack of both tree seedling regeneration and establishment of vegetation in general because of livestock use following timber sale harvesting is also a concern.

Criteria

Executive Order 11990 states that BLM will avoid long and short-term adverse impacts associated with destruction, loss, or degradation of wetland-riparian areas. BLM must also ensure the preservation and enhancement of "the natural and beneficial values of wetland-riparian areas which may include constraining or excluding those uses that cause significant, long-term ecological damage." A variety of methods may be employed, including the use of management actions designed to maintain or improve riparian habitat, inclusions of stipulations or conditions in BLM leases, granting of licenses and permits, and development of detailed plans for watershed management.

7. Recreation Management

The Issue

a. How should BLM address the overcrowding of existing recreational facilities and the deterioration in the quality of recreational experiences in the Lemhi Resource Area?

b. What management practices should occur within areas of national significance?

Background

Recreation in the area is primarily centered around the Lemhi and Salmon rivers. The increasing popularity of float boating and the improvement of the steelhead fishery has attracted, and continues to attract, increasing numbers of visitors. Increased recreational use pressures are affecting public recreation opportunities because of space, access, and facility limitations. There is a need to identify recreation sites for development and areas for access acquisition.

The Lewis and Clark Trail and the Continental Divide Trail are of national significance and have been designated by Congress as parts of the National Trail System. The Salmon River from its headwaters to North Fork, Idaho, has been identified as a potential Wild and Scenic Study River. All of these areas are managed as special recreation management areas by BLM.

Criteria

BLM will manage recreation on the public lands. A variety of ways to maintain or improve recreation opportunities will be considered. Some areas may be subject to special restrictions to protect resources or eliminate or reduce conflicts among uses.

BLM may develop and maintain various recreation facilities on the public lands, including campgrounds, picnic areas, and boat launches. These recreation facilities would be provided to meet existing or anticipated demand.

All rivers on the Nationwide River Inventory will be evaluated as suitable or nonsuitable for addition to the National River System. Criteria for the evaluation are the guidelines prepared by the Secretaries of Interior and Agriculture in 1970.

8. Off-Road Vehicle (ORV) Management

The Issue

Which areas should be designated as open, limited, or closed?

Background

ORV use east of Salmon in the vicinity of the existing motor-cross track and cross-country course conflicts with existing livestock grazing and the operations of the Salmon City Gold Company. In the Agency, Pattee, and McDevitt Creek drainages, snowmobile use may disturb big game on their crucial winter ranges.

ORV use is a popular activity in the area. However, unrestricted ORV use could create conflicts with watershed management, wildlife habitat, livestock management, and recreational uses. Designation of open, limited, or closed areas of ORV use could protect resource values at risk.

Criteria

Where control of ORV use is required, public lands will be designated as either open, limited, or closed to motorized vehicles. In making these determinations BLM will consider the following:

a. Public safety

b. Conflict resolution

c. Resource protection requirements

d. User access requirements

9. Wilderness Suitability

The Issue

Should the Eighteenmile Wilderness Study Area (WSA) or any portion of the WSA be recommended as suitable or nonsuitable for wilderness designation?

Background

The Eighteenmile area has been identified as a wilderness study area (WSA). This indicates it meets the legal requirements for wilderness characteristics: it contains a minimum of 5,000 acres, is in a near natural state, and possesses outstanding opportunities for solitude or primitive and unconfined recreation. The area adjoins lands in the Salmon, Targhee, and Beaverhead forests that are being studied for wilderness suitability (Italian Peak, XI-1945). All of the WSA has been leased for oil and gas. Other known minerals found in the WSA are phosphates and gypsum. Several areas of commercial timber have been identified. A wilderness decision by Congress will determine the potential for development of existing resources.

Criteria

A recommendation for preservation as wilderness or nonwilderness must be based on an environmental analysis of the designation/nondesignation impacts.

MANAGEMENT ACTIONS OR CONCERNS COMMON TO ALL ALTERNATIVES

1. Fire Management

Develop a fire management plan for the Lemhi Resource Area and maintain vegetation types based on:

a. Capability of the land for improvement through fire manipulation

b. Protection of certain public and private lands (e.g., critical wildlife and watershed areas, cultural resources, privately owned structures such as homes, oil and gas pumping stations, etc.)

c. Need to change plant communities to a subclimax vegetation, primarily for the benefit of livestock and wildlife forage, as well as to improve watershed conditions

d. Economic impacts of any fire management alternatives

2. Cultural Resource Management

BLM will manage cultural resources so that representative samples of the full array of scientific and socio-cultural values are maintained consistent with state and federal laws.

The Lemhi Valley has special cultural resource significance because of the high socio-cultural value the Lemhi Shoshone place on the area as a significant part of their heritage. The American Indian Religious Freedom Act (P.L. 95-341) emphasizes considering the impact of federal policies and procedures on American Indian religious freedoms. Many of the tribal members now residing on the Fort Hall Reservation, as well as the local Lemhi Indians, are descendants of the Sheepeater or Mountain Shoshoni and the Lemhi Indians who resided in the Lemhi River Valley until the reservation at Lemhi was closed and most moved to Fort Hall in 1907. The values, memories, and traditions attached to the Lemhi River Valley by these Indians are as important as the material remains themselves.

Significant sites or districts will continue to be managed for their cultural resource values. Management will emphasize appropriate site use through the development of specific management plans which identify cultural resource protection and use objectives, establish the actions BLM must take to achieve its objectives, and outline procedures for evaluating accomplishments.

During the planning process there has been consultation with the Idaho State Historic Preservation Office (SHPO).

3. Noxious Weeds

Control of noxious weeds is an important management concern. Especially important is Leafy Spurge (Euporbia esula), which has infected the area from Kirtley Creek to Badger Springs. Leafy Spurge is a very persistent perennial that spreads both vegetatively and by seeding. It is difficult and expensive to control and is readily spread by livestock and wildlife. It is the most persistent weed known of all the weeds capable of growing in this climatic area. BLM policy is to control noxious weeds and BLM has prepared the "Idaho Noxious Weed Control Environmental Assessment." Control of noxious weeds will be accomplished through close coordination and cooperation with Lemhi County and the Lemhi County Agent.

As stated in the "Idaho Noxious Weed Control Environmental Assessment" the purpose of weed control is twofold:

a. To reduce present and future economic losses to ranchers, farmers, and the general public caused by reduced crop yields, lowered rangeland productivity, and costly weed control efforts. These losses could be reduced by controlling the designated noxious weeds on public lands.

b. To comply with state and federal laws. Federal law restricts interstate shipping of contaminated products and addresses itself to weed control efforts. These losses could be reduced by controlling the designated noxious weeds on public lands.

BLM is responsible for implementing the proposed weed control program on public land and may do so through cooperative agreements with county weed control districts. The Idaho Department of Agriculture is responsible for coordinating weed control activities on federal, state, and private land. Proposed control efforts to minimize infestations of noxious weeds will use an interdisciplinary approach.

The need to control noxious weeds has been recognized by federal and state lawmakers. It is also demonstrated by annual estimated economic losses which could be reduced by an effective weed control program.

As stated in the Standard Operating Procedures noxious weed control will be considered under all alternatives. Individual sites and species (larkspur, canadian thistle, leafy spurge, etc.) will be handled on a case-by-case basis through the environmental assessment (EA) process. Where biological controls have proven to be effective, they will be used in preference to chemical or mechanical methods.

4. Threatened and Endangered Plants and Animals

Whenever possible, management activities in habitat for threatened, endangered, or sensitive species will be designed to benefit those species through habitat improvement.

The Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service (USFWS) will be consulted prior to implementing projects that may affect habitat for threatened and endangered species. If a "may affect" situation is determined through the BLM biological assessment process, consultation with the USFWS will be initiated in accordance with Section 7 of the Endangered Species Act of 1973, as amended.

The BLM is aware of the presence of three listed species (gray wolf, peregrine falcon, and bald eagle) in the Lemhi Resource Area. Also, several plants are listed as candidate species. Therefore, BLM has consulted with the USFWS throughout the Lemhi RMP process and will continue to coordinate with the USFWS.

QUESTIONS AND CONCERNS NOT ADDRESSED

The following questions and management concerns were considered but not analyzed in the planning process.

"Access for minerals and energy exploration is a concern. Conflicts exist where roads to public lands cross private land."

The access concern cannot be addressed in alternative levels (proposed levels of management action). The resource area staff will continue to work with those landowners who own lands which block access to large parcels of public land. Negotiations to obtain an access easement where needed to manage the public lands will be sought. In some cases, the guarantee of total public access onto or through private lands may not be possible.

"Utility Corridors may be needed for future development."

Should area growth require additional transmission lines, there are regulations and BLM procedures that will allow for this.

"Trespass land uses should be identified".

Resolution of trespass land use involves an administrative decision, adequate funding, and commitment of manpower.

"What opportunities exist for blocking state and federal lands?"

The current Idaho BLM policy and directives require development of a statewide program, in coordination with the state of Idaho, to identify opportunities for blocking and the process for the blocking of both state and BLM lands. An amendment would be prepared on this action and incorporated into those plans in effect, including this RMP, at the time of approval.

"Are there any Areas of Critical Environmental Concern (ACECs)?"

There are no identified ACECs in the resource area. If such areas are identified in the future and their resource values cannot be protected through other management techniques, ACEC designation will be proposed and a plan amendment completed for the Lemhi RMP.

MULTIPLE USE AND TRANSFER CLASSES

The Lemhi RMP Area has been broken down into the following multiple use or transfer classes: intensive use, moderate use, limited use, or transfer. Multiple use and transfer classes are general planning categories included in Idaho RMPs to provide statewide consistency and uniformity.

Multiple use and transfer classes serve two purposes in this plan. The first is to describe overall opportunities and constraints by indicating what level of resource production and use is appropriate, what intensity of management is needed, whether there are sensitive and significant resources that must be protected, and whether BLM would consider transfer of public lands from its jurisdiction. The second purpose is to provide a basis for considering unexpected proposals by supplementing the detailed resource management objectives and required actions established for the resource area with general purpose and policy statements. This feature is intended to help keep the plan responsive to future demands and to reduce the number of future plan amendments that otherwise might be needed.

Prior to undertaking or approving any proposed resource management action on public lands in the resource area, BLM will ensure that such action is consistent with the purposes and policies of the multiple use or transfer class or classes involved.

The multiple use classes assigned to the RMP area for each alternative are shown on Maps 5 through 12. Map 5 illustrates all of the potential transfer classes. Public lands are placed in the multiple use or transfer class that best reflects the specific resources and management priorities for the area. The multiple use and transfer classes described for the RMP area pertain only to the surface acreage managed by the BLM. A description of these classes and their purposes and policies is given in the following sections.

Moderate Use Class

A total of 140,047 acres are classified as moderate use in this RMP.

Purpose

The purpose of a moderate use class is to delineate public lands that are suitable for a wide variety of existing and potential uses.

Policy

The first priority for managing a moderate use class is to provide for the production or use of forage, timber, minerals and energy, recreation, or other consumptive resources while maintaining or enhancing natural systems. These areas will be managed for a moderate intensity of use and will generally be available for production and use of consumptive resources, subject to BLM standard operating procedures and other controls as needed. Sensitive and significant resource values, however, will be protected consistent with federal and state law. Public lands in a moderate use class will be retained in federal ownership.

Limited Use Class

A total of 313,684 acres are classified as limited use in this RMP.

Purpose

The purpose of a limited use class is to delineate public lands where strict environmental controls are required to protect sensitive and significant resources.

Policy

The first priority for managing a limited use class is to protect key wildlife habitat, scenic values, wilderness, cultural resources, watershed, and other sensitive and significant resources while providing for other compatible uses. These areas will be managed for relatively low intensities of use and with strict environmental controls to protect sensitive and significant values. A limited use class may be closed to or contain restrictions on off-road vehicle use, mineral and energy exploration and development, forest management practices, location of utility corridors and installations, and livestock grazing. Because of the relatively significant environmental considerations in these areas, some uses may not be permitted. Special attention will be given to finding appropriate locations for compatible uses. Public lands in a limited use class will be retained in federal ownership.

Intensive Use/Development Class

Classified as Intensive Management: Nine Recreation Sites:

Existing

Tower Rock
Morgan Bar
Shoup Bridge
Williams Lake
Agency Creek
McFarland
Smokey's Cubs

Proposed

Elevenmile
Camp Creek

Purpose

The purpose of an intensive use/development class is to delineate areas suitable for large-scale intensive use and development.

Policy

The first priority for managing an intensive use/development class is to provide for existing and projected demands for large-scale intensive use and development. Intensive use areas are generally reserved for major recreation sites or facilities, off-road vehicle intensive use areas, large-scale mineral or energy extraction operations, military use areas, or major utility installations. These areas will be managed for a high intensity of use. Because of the potential for conflict with other uses in these areas, some uses may not be permitted. Protection of sensitive and significant resources, however, will be ensured, consistent with federal and state law. Public lands in an intensive use/development class will be retained in federal ownership.

Transfer Class

A total of 5,835 acres are classified for transfer in this RMP.

Purpose

The purpose of a transfer class is to delineate public lands that may be considered for transfer out of federal ownership.

Policy

The transfer class is the class in which public lands may be transferred out of federal ownership under this plan. Public lands declared eligible for transfer by their inclusion in this category are subject to detailed consideration prior to the final decision regarding transfer. Transfer classes are delineated in response to specific developments, community expansion, and other transfers, including transfers to the state of

Idaho. Transfer classes will be managed on a custodial basis until transferred from federal jurisdiction. New public investments in these lands will generally be kept to a minimum.

THE PROPOSED MANAGEMENT PRESCRIPTION

This section identifies resource management objectives and required management actions. The resource management objectives set priorities for managing the various resources in the area. Required management actions identify the management actions, limitations, and other provisions that are needed to accomplish the objectives.

1. Lands

   Management Objective: Retain a public land base of 453,731 acres for long-term management in federal ownership.

   Required Management Actions: BLM would examine 4,495 acres of public land, applying the standard operating procedures for sales or for state or private exchanges. An additional 1,340 acres would be considered for transfer under the Desert Land Act. Detailed examinaction would be made before any lands were transferred under sale, exchange, or Desert Land Application. BLM would acquire 5,600 acres.

2. Minerals

   Management Objective: Manage 475,595 acres of federal mineral estate for mineral and energy exploration and development while minimizing adverse impacts to other resource values.

   Required Management Actions: A total of 161,904 acres would be open for oil and gas leasing with standard stipulations, 221,519 acres with seasonal occupancy restrictions, and 77,369 acres with no-surface-occupancy restrictions. Approximately 14,796 acres would be closed to oil and gas leasing. About 161,214 acres would be available for geothermal leasing with standard stipulations, 221,519 acres with seasonal occupancy restrictions, and 89,165 acres with no surface occupancy; 15,596 acres would be closed. A total of 455,434 acres would be open for the location of mining claims, while 18,821 acres would be closed to mineral entry. An additional 540 acres would be open to location but subject to superior rights established by community pit and mineral material site designations. Mineral material (sand and gravel) disposals would be permitted on 382,888 acres; 92,010 acres would be closed.

3. Forest Management

   Management Objective: Intensively manage 28,865 acres of available commercial forest land for the sustained yield production of timber. Manage 23,138 acres of woodland for the production of woodland products (firewood, Christmas trees, etc.).

Required Management Actions: Timber sales could occur on 28,865 acres. Of this acreage, 1,179 acres would receive special management to protect critical elk winter range. An additional 581 acres would receive special management to enhance the Continental Divide National Scenic Trail. Setting aside of 1,354 acres of commercial forest land would be made to protect Wilderness Values within the Eighteenmile Wilderness Study Area. Another 15 acres would be set aside to protect the Williams Lake Recreation Site. In order to maintain the visual qualities of the existing landscape along the Continental Divide Trail, 75 acres of commercial forest land would be withdrawn. No timber harvesting would be scheduled in any of these withdrawn stands.

Woodland product sales (firewood, Christmas trees, etc.) would occur on 23,183 acres. Within the Eighteenmile Wilderness Study Area, 2,509 acres would be closed to woodland product sales. In addition, 622 acres would be closed along the Continental Divide Trail.

4. Range Management

Management Objective: Manage 459,481 acres for grazing. Improve 595 acres of poor condition range to good and 21,876 acres of fair condition range to good. Provide 52,632 animal unit months (AUMs) of livestock forage in 20 years.

Required management Actions: In the long-term, reductions would be made on 46 allotments, increases would occur on 6, and 36 would remain unchanged. Grazing adjustments would be made over the 20-year life of the RMP and would occur only after conducting monitoring studies and coordinating with affected users. The initial stocking level of 43,602 AUMs would be below the active preference and the five-year average use. The long-term stocking level of 52,632 AUMs would be 18 percent below the active preference but only 2 percent below the five-year average use. Proposed improvements would include 22,718 acres of brush control, 4,425 acres of seedings, 32 springs, 50 miles of pipelines, 4 reservoirs, and 63 miles of fences. Selected allotment management plans (AMPs) would be designed to maintain or enhance forage for wintering elk herds (8,800 acres). Refer to Appendix B for specific allotment recommendations.

5. Wildlife

Management Objective: Provide forage for 10,113 deer, 2,194 elk, 2,950 antelope, and 200 bighorn sheep. Improve 4,000 acres of elk winter/spring range; 17,000 acres of deer, antelope, and sage grouse seasonal ranges; and 22,000 acres of nongame habitat from fair to good ecological range condition to good. Improve 7,320 acres of seasonal elk and bighorn sheep ranges. Provide 40 acres of river habitat for waterfowl. Provide a more consistent water supply on 81,000 acres of antelope, sage grouse, and non-game habitat in the

Gilmore and Muddy Creek area. Preserve habitat values of 30 small isolated seeps and wet meadows created by livestock water developments. Enhance big game movement and safety. Protect the future integrity of the elk breeding area in McDevitt Creek and antelope migration corridor near Center Ridge. Enhance the integrity and availability of 69,057 acres of crucial habitat of raptors, waterfowl, elk, and other wildlife. Improve the quality of 10,400 acres of crucial elk and bighorn habitat. Enhance bighorn sheep health protection in the Little Eightmile to Eighteenmile area.

Required Management Actions: BLM would reserve 6,749 AUMs of forage for big game. Six habitat management plans (HMPs) would be developed on 260,056 acres. Prescribed burning would occur on 7,320 acres of big game range and 40 acres of river habitat. BLM would install 18 guzzlers, construct six miles of pipeline, and fence numerous guzzlers (2 1/2 miles of fence). Roughly 3 to 4 miles of fence would be required on 30 small isolated seeps. About 154 miles of fence would be modified for big game movement and safety. BLM would acquire 4,960 acres of state land and 640 acres of private land to protect critical habitat in the McDevitt Creek and Center Ridge areas. Crucial habitat would be enhanced through adoption of no-surface-occupancy restrictions on 69,057 acres available for mineral leasing. The quality of 8,800 acres of big game habitat would be improved through restrictions on livestock use and timber management and harvest. Bighorn sheep health protection would be improved by shifting all domestic sheep use to cattle use from Little Eightmile to Eighteenmile Creek.

6. Watershed Management

Management Objective: Manage 15.5 miles of stream to improve riparian habitat and water quality. Improve 500 acres of riparian area that are in unsatisfactory condition. Improve 1,494 acres of unsatisfactory condition watershed to satisfactory condition.

Required Management Actions: Four watershed activity plans would be written to help evaluate management options in different areas within the RMP area. New timber harvest roads would be closed at the completion of timber sales. BLM would fence 15.5 miles of perennial stream riparian area.

7. Fisheries Habitat Management

Management Objective: Maintain 94.7 miles of stream in their present condition; improve 3.0 miles of McDevitt Creek from fair to excellent condition. Improve 2.5 miles of Sevenmile Creek, a tributary to the Salmon River.

Required Management Actions: Livestock grazing would be managed to maintain existing fishery habitat. Surface disturbing activities that would affect fisheries habitat would not be allowed. Stabilization projects would be considered in areas with unstable banks. Livestock would be excluded on 2.25 miles of Sevenmile Creek and 3.0 miles of McDevitt Creek and associated riparian areas by fencing. The current land ownership pattern would be retained.

8. Recreation Management

Management Objective: Recognize recreation as the principal use of the lands in the three special recreation management areas—the Salmon River, Continental Divide Trail, and Lewis and Clark Trail. Continue to manage for dispersed recreation by maintaining existing recreational opportunity settings. Manage the visual resources on lands outside of the special recreation management areas to maintain existing scenic qualities. Protect existing and planned investments in developed recreation sites.

Required Management Actions: The three special recreation management areas (SRMAs) would entail mineral withdrawals, restrictions on some nonrecreational uses, and restrictive visual management practices. A recreation area management plan (RAMP) would be written for each SRMA.

The Salmon River SRMA would include 4,405 acres. River access recreation sites would be constructed at Camp Creek and Elevenmile. The river would be managed as a "recreational" wild and scenic river, but Congressional direction for a formal Wild and Scenic River Study is not anticipated.

The Continental Divide National Scenic Trail SRMA would include 4,600 acres that would result from establishing a trail corridor one-quarter mile on either side of the proposed treadway. Visual resources within the corridor would be managed under Class II guidelines within a 200-foot-wide corridor along the treadway and under Class III guidelines within the remainder of the corridor. The withdrawal of 75 acres of commercial forest land from the timber production base and all woodland product sales would be proposed. Restricted management activities on an additional 518 acres is proposed in order to maintain existing visual qualities. Restrictions may be imposed on the size of harvest units, siting of roads, slash disposal, and percentage of cover reduction.

The Lewis and Clark National Historic Trail SRMA would include 9,080 acres that would result from establishing a corridor wide enough to retain the natural aspects of the historic trail route. Visual resources within the corridor would be managed under Class II guidelines. Withdrawal of 1,820 acres from mineral entry would protect the trail route from disturbance. A no-surface-occupancy stipulation would also be added to all leases within these 1,820 acres.

Recreation Opportunity Spectrum: Recreation opportunities in the recreation opportunity spectrum (ROS) classes would remain similar to the existing situation. Lands would be managed in the primitive (.8 percent), semi-primitive nonmotorized (2.4 percent), semi-primitive motorized (4.2 percent), roaded natural (90.6 percent), and rural (2 percent) opportunity classes.

Off-Road Vehicle Use: Lands open to unrestricted vehicle use would total 428,540 acres (93 percent). Recreational off-road vehicle use would continue to be limited during winter months on 16,230 acres (6 percent of the RMP area) of big game winter range. A year-round closure to all vehicle use would be placed on 14,796 acres (3.5 percent of the RMP area) because of a wilderness designation.

Visual Resource Management: For visual resource management, the following designations would be made: Class I, 14,796 acres; Class II, 29,280 acres; Class III, 184,205 acres; and Class IV, 231,285 acres. No interim classes would remain.

Withdrawals: Existing and planned investments in developed recreation sites would be protected by withdrawal of 186.75 acres from mineral entry. However, revocation of existing withdrawals on 640.14 acres no longer required for recreation program management would be recommended. An additional 800 acres at Sharkey Hot Springs would be closed to geothermal leasing, subject to valid existing rights. Withdrawal of 15 acres of productive timber in the existing Williams Lake Campground would be necessary.

9. Wilderness

Management Objective: Recommend 14,796 acres of the Eighteenmile Wilderness Study Area as wilderness and the remaining 10,126 acres as nonwilderness.

Required Management Actions: Following designation by Congress, a wilderness management plan would be prepared for 14,796 acres of the Eighteenmile Wilderness Area. Approximately 1,354 acres of commercial forest land would be withdrawn from the timber production base. The 14,796 acres would be withdrawn from mineral entry and leasing as well as closed to all vehicle use.

10. Fire Management

Management Objectives: Manage fire for the protection and enhancement of resource values such as livestock forage, wildlife habitat, and timber. Reduce fire hazard potential on 10,000 acres.

Required Management Actions: Full suppression fire management guidelines would be followed on 444,770 acres. Under this alternative, 14,796 acres would be managed under the suppression restriction to maintain wilderness quality. All developed recreation sites and sites that have the potential for site development would be under suppression restrictions, i.e., no retardant, no heavy equipment use, and no fire line explosives. Prescribed burns for vegetation manipulation would be conducted on 30,078 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

11. Cultural Resources

Management Objectives: Manage cultural resources so that representative samples of the full range of scientific and socio-cultural values are maintained consistent with state and federal laws.

Required Management Actions: Cultural resource management plans would be written and implemented for the Chief Tendoy Cemetery, the Salmon River corridor, the two Indian burial areas, and the Lewis and Clark Trail. These sites would be protected from surface disturbance through appropriate withdrawals and no-surface-occupancy restrictions.

Cultural Area	Withdrawals	No Surface Occupancy
a. Chief Tendoy Cemetery	80 acres	160 acres
b. Lewis and Clark Trail	1,820 acres	1,820 acres
c. Salmon River Corridor	120 acres	4,405 acres
d. Indian Area A	120 acres	120 acres
e. Indian Area B	120 acres	880 acres

SELECTION OF THE PREFERRED ALTERNATIVE

Seven alternatives are analyzed in the Lemhi Resource Management Plan EIS (Part II of this document). Each alternative emphasizes a different management philosophy, ranging from continuing present management to making significant changes in future management. Impact assessment of these alternatives has identified the magnitude of environmental consequences associated with each. A preferred alternative has been selected based on the planning criteria previously described.

Planning criteria are the factors or data that BLM must consider prior to arriving at a land use decision relative to any issue. Listed below are the planning criteria and a discussion of how the ten general criteria have been applied in selection of the Preferred Alternative.

A. Social and Economic Values

The Preferred Alternative considers social and economic values in Lemhi County by providing for land disposal, livestock grazing, mineral development, and timber harvest. About 5,835 acres would be transferred from federal ownership. Livestock management would provide 43,602 AUMs of livestock forage. A total of 460,797 acres would be open for oil and gas leasing and 455,434 acres would be open for location of mining claims. Approximately 28,865 acres of public forest land would be open to commercial harvest, with an allowable cut of 1.07 million board feet per year.

B. Plans, Programs, and Policies of Other Federal Agencies, State and Local Governments, and Indian Tribes

BLM's resource management plans must be consistent with officially approved and adopted resource-related plans (or in their absence, policies or programs) of other federal agencies, state and local governments, and Indian tribes. The Preferred Alternative is consistent with the 1981 Lemhi County Comprehensive Plan. Public input from federal agencies, state and local governments, and Indian tribes does not indicate that there are any inconsistencies with their plans.

C. Existing Law, Regulations, and BLM Policy

In the Preferred Alternative, there does not appear to be any discrepancy with existing law, regulation, or BLM policy.

D. Future Needs and Demand for Existing or Potential Resource Commodities and Values

The demand for minerals and energy is expected to remain low. The demand for the livestock grazing resource is high and there is a moderate demand for the timber resource. The Preferred Alternative meets or exceeds these demands.

A lot of land is leased for mineral and energy development, but actual development is limited. Coal does occur in the Lemhi Resource Area but is of low quality; no coal mines have operated in the area for over 40 years. Leasing interest for geothermal resources is generally low. Phosphate rocks of low and medium grade do occur but development in the near future is unlikely.

The average use by livestock the past five years has been 52,541 AUMs, while the initial stocking rate would be 43,602 AUMS, the long-term stocking rate would increase to 52,632 AUMS.

Approximately 28,865 acres of public forest land would be open to commercial harvest, with an allowable cut of 1.07 million board feet per year.

E. Public Input

The Preferred Alternative has taken into consideration the concerns of the minerals and energy industry by making lands accessible and available for exploration. Other public concerns have dealt with range resource, wildlife habitat, wilderness, lands disposal, and timber harvest. The Preferred Alternative provides for the protection and use of all of these resources.

F. Public Welfare and Safety

Facilities provided at developed campgrounds and other recreational areas would provide for public welfare and safety. While public land within areas identified as open to motorized vehicle use generally would remain available for such use without restrictions, restrictions could be imposed when there was a need to promote user safety. To provide for public safety, stipulations would be included in mining plans of operations. Public hazards would be clearly marked and fenced, if necessary, to prevent injury. Full suppression fire management guidelines would be followed on 444,770 acres. In addition, heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

G. Past and Present Use of Public and Adjacent Lands

The Preferred Alternative provides for the continuation of past and present use of public and adjacent lands while still providing for the protection and development of other resource values.

Livestock management would provide 43,602 AUMs of livestock forage in the short-term and 52,632 in the long-term. A total of 460,797 acres would be open for oil and gas leasing and 455,434 acres would be open for location of mining claims. Approximately 28,865 acres of public forest land would be open to commercial harvest, with an allowable cut of 1.07 million board feet per year. Game populations of 10,113 deer, 2,194 elk, 2,950 antelope, and 200 bighorn sheep would utilize 6,749 AUMs of forage. For fisheries, BLM would maintain 94.7 miles of stream in their present condition and improve 3.0 miles. A total of 15.5 miles of perennial stream riparian area would be improved.

This alternative would recognize recreation as the principal use of the lands in three special recreation management areas. Lands open to unrestricted vehicle use would total 428,540 acres.

H. Public Benefits of Providing Goods and Services in Relation to Costs

It is estimated that it would cost $1.7 million over the 20-year life of the RMP to provide goods and services. However, over a 20-year period, revenues of $10.8 million would be generated and state and local governments would receive $9.6 million.

I. Quantity and Quality of Noncommodity Resource Values

The Preferred Alternative provides noncommodity resource values such as wildlife,fisheries, watershed, recreation,wilderness, and cultural sites. The quantity and quality of these resources would best be protected by alternative C. However, the Preferred Alternative would result in game populations of 10,113 deer, 2,194 elk, 2,950 antelope, and 200 bighorn sheep. For fisheries, BLM would maintain 94.7 miles of stream in their present condition and improve 3.0 miles. A total of 15.5 miles of perennial stream riparian area would be improved.

This alternative would recognize recreation as the principal use of the lands in three special recreation management areas. Lands open to unrestricted vehicle use would total 428,540 acres. The Preferred Alternative recommends 14,796 acres as suitable for wilderness designation. Four cultural resource management plans would be written.

J. Environmental Impacts

Transfer of lands out of federal ownership would result in a loss of administrative control of all resource values except mineral values. Designation of the Eighteenmile WSA as wilderness would result in the loss of harvestable timber yield from suitable commercial forest land in that area. Completion of nonstructural range improvements would represent a commitment of land and resources for the lives of the projects. Recreation opportunity spectrum classes that shifted from primitive and semi-primitive nonmotorized to semi-primitive motorized and roaded natural would likely never return to the original class.

On the positive side, the Preferred Alternative would provide for improvement in ecological range condition. Livestock AUMs would show a minor increase over the 5-year average use. Wildlife habitat condition and available AUMs would increase. Fisheries habitat would show a moderate improvement. Improvements in riparian areas and watershed can be expected. A major increase in recreational opportunities would take place. Wilderness acreage would be 14,796 acres. Impacts to cultural resources would decrease slightly.

Conclusion

Alternative F has been chosen as the Preferred Alternative. It gives no special emphasis to any one resource but emphasizes balanced, multiple-use management and is based upon a realistic expectation of funding. Alternative G would be the Preferred Alternative if the Eighteenmile Wilderness Study Area was not designated by Congressional action. The rationale for selection of the Preferred Alternative is summarized below.

LANDS - Retention and Transfer

Issue No. 1 deals with the disposal or retention of public lands. The Preferred Alternative identifies a total of 5,835 acres to be evaluated through detailed studies for potential transfer out of public ownership. Of this total, 4,295 acres would be considered for transfer by public sales or exchanges; 1,340 acres through the Desert Land Act; and 200 acres by exchange only. Land acquisitions include the possibility of acquiring 1,240 acres of private and 4,360 acres of state land.

Rationale

The issue of disposal or retention of the public lands can best be handled by using a balanced land tenure adjustment program that improves management efficiency. The Preferred Alternative would allow for a balanced sale, exchange, and Desert Land Entry program. This alternative maintains continuity in the grazing program and retains parcels that have high wildlife and other multiple use values. Only parcels of relatively low multiple use value that are difficult to manage or present management problems would be available for transfer.

The Preferred Alternative would also recognize the expressed need to make land with agricultural potential available for development under the Desert Land Act. The lands specifically available for agricultural development would be transferred only if determined suitable as a result of the required detailed studies. Otherwise, they would be retained in federal ownership. This would assure continued multiple use management if the lands were not suitable for agricultural development.

Acquisitions would be aimed at benefitting the wildlife program (Issue No. 2b) by acquiring valuable wildlife habitat and migration corridors.

MINERALS

The Preferred Alternative would maintain approximately 97 percent of the RMP area open to energy leasing, 81 percent open to solid mineral leasing and saleable mineral disposals, and, 96 percent open to mineral location. All of the RMP area is prospectively valuable for oil and gas. The occur- rence of known solid leasable minerals is limited to a small area, ap- proximately half of which would be closed. Mineral materials are wide- spread throughout the RMP area.

Approximately 18,921 acres would be withdrawn from mineral location by the recommendation for wilderness designation on a portion of the Eighteenmile WSA for the protection of important historical and cultural resources, and for the protection of recreational developments. Roughly 92,596 acres would be closed to solid mineral leasing, but only 1,580 acres or 2 percent of this has any known potential for solid mineral leasing.

Rationale

The specific issues affecting minerals management are wildlife (Issue #5), wilderness (Issue #9), and recreation (Issue #7). In addition, minerals are affected by the management concern relating to cultural resources. The Energy and Minerals issue (#2) asks, "How will energy and mineral resource development be accommodated?" (2a); and "What lands would be closed to various mineral activities for the preservation of other resources?" (2b). These issues are addressed and answered in the RMP Preferred Alternative as follows:

Wildlife (Issue #5): This issue is addressed by the seasonal closures for fluid mineral leasing and by some of the closures to solid mineral leasing and mineral material sales. Disruption of wildlife habitat by operations under the 1872 Mining Law can often be reduced or mitigated during the review process under the surface management regulations.

Wilderness (Issue #9): The issue is whether or not the Eighteenmile Wilderness Study Area (WSA) should be recommended for wilderness designation. Under this alternative, over half (roughly 60 percent) of the WSA would be recommended for wilderness designation. Designation of the area as wilderness would close it to mineral activity. Preliminary data (Geology, Energy, and Minerals Studies Phase 1 and Phase 2) indicate that potential for mineral develop- ment of this area is low. There are no known mineral occurrences within the WSA, and there are no mining claims located within the WSA. The Phase 2 study conducted by the U.S. Geological Survey is not conclusive as to the possibility of mineral occurrences within the area, since some of their geochemical data may indicate potential for metallic minerals. However, the lack of reported occurrences and mining claims is a good indicator that the industry may consider the area to have low potential. Therefore, the withdrawal of this area from all forms of mineral activity is thought to have no significant impact on national mineral production.

Recreation (Issue #7): The first recreation issue (#7a), overcrowding of facilities, would hardly affect mineral production. Developed recreational areas would be withdrawn from the operations of the mining law, closed to mineral material sales and hardrock mineral leasing, and leased for fluid minerals only with the no-surface-occupancy stipulations. None of the existing recreation sites, or future proposed sites, are in areas with known mineral potential, so any impact would be small if areas were closed or withdrawn.

The second recreation issue (#7b) is, "What management practices should occur within areas of national significance?" This issue is answered by the use of no surface occupancy for fluid mineral leasing and the closure of some areas to material sales and solid mineral leasing in the Preferred Alternative. Activity under the 1872 Mining Law can be adequately managed under the surface management regulations during the Plan of Operations review process. In general, the primary restrictions on minerals would be placed on the Lewis and Clark Trail area, the Salmon River corridor, and the Continental Divide Trail. Of these areas, only the Continental Divide Trail has a significant known mineral deposit (primarily thorium), and the trail would not be withdrawn from location under the Preferred Alternative.

Cultural Resources (Management Concern #2): Under the Preferred Alternative, this management concern would be answered by the use of the no-surface-occupancy stipulation for fluid mineral leasing, closure to solid mineral leasing and mineral material sales, and, where necessary, withdrawal from the operation of the 1872 Mining Law. In general, closures would be small and would have little, if any, impact on local or nationally significant mineral values.

FOREST MANAGEMENT

Under the Preferred Alternative, over 95 percent of the suitable commercial forest land would be available for intensive forest management. The set-aside acreage under this alternative would amount to 90 acres for protection of recreation values and 1,354 acres for protection of recommended wilderness.

Of the 95 percent available for intensive management, approximately 6 percent would be restricted for protection of high value resources. Specifically, 1,179 acres would be restricted to reduce the impacts to critical elk winter range and 581 acres to maintain the visual qualities of the existing landscape along the Continental Divide National Scenic Trail.

Approximately 88 percent of the woodland within the planning area would be open to woodland product sales (firewood, Christmas trees, etc.). The remaining 12 percent would be closed to protect 622 acres having high recreation values and 2,509 acres encompassing recommended wilderness.

Intensive management of the 28,865 acres of available commercial forest land would enable the planning area to support its present sustained yield allowable cut of approximately 10.71 million board feet per decade.

Rationale

The Preferred Alternative recognizes the local demand for timber while accommodating other high value resources requiring protection from the impacts of timber harvesting. This alternative designates the commercial forest lands available for intensive management (Issue 3a) and provides for the planning area to meet its present sustained yield allowable cut. The alternative further delineates areas of restricted management in response to important recreation, watershed, and wildlife values (Issue 3b).

Protection of certain high value resources includes the set-aside of 1,444 acres necessitated by the importance of maintaining the visual quality within the proposed Eighteenmile Wilderness Study Area, Continental Divide National Scenic Trail, and the Williams Creek Recreation Site.

Less restrictive measures allowing the harvest of timber were found to be inadequate in the proposed management of these resources under this alternative. All of the proposed set-asides in this alternative are in conformance with current BLM forest land policy.

Selection of this alternative provides an even supply of timber to local markets, yet mitigates the impacts of timber harvesting on other important resource values. Designations of set-asides and restrictions are consistent with current BLM Forest Land Policy; they eliminate major impacts to conflicting resources while having negligible economic impact to the local community.

RANGE MANAGEMENT

The Preferred Alternative is based on 459,481 acres of public land in 88 grazing allotments with the short-term grazing preference reduced from 63,898 AUMs to 43,602 AUMs. If transfer of 5,182 acres from public land to private ownership occurred, this would result in 454,299 acres in 82 allotments with a short-term grazing preference of 42,842 AUMs. The long-term stocking level would be between 51,872 AUMs and 52,632 AUMs depending on the acres transferred.

The Preferred Alternative recognizes the need to improve watershed condition, riparian areas, and livestock distribution while providing forage and habitat for wildlife and initiating a brush control program. Seeding would be done in areas where a native perennial seed source was not available. Additional range improvements--spring developments, pipelines, reservoirs, and fences--would also be provided.

Rationale

Livestock grazing on public land is an important economic resource for this area. It maintains most of the current livestock operations. The Preferred Alternative would provide for multiple use by allowing livestock grazing, soil protection, wildlife habitat, and other resource uses. Range improvements would be designed to enhance, or to have few adverse impacts on, the other resource uses.

The Preferred Alternative would address three issues: (a) managing the range resource to meet existing and future livestock demand, (b) designating forage for livestock and wildlife uses, and (c) using special management techniques for livestock grazing to improve sensitive areas.

WILDLIFE

The Preferred Alternative would provide for existing big game populations and Idaho Department of Fish and Game population projections for 1995. It would provide for improvement of crucial elk winter range; deer, antelope and sage grouse habitat; and nongame habitat. Habitat would be protected or enhanced through acquisition of limited acreages of state and private land; moderate restrictions on livestock use, forestry, and mineral activity; and retention of all important habitat. Fences presenting a hazard or movement problem for big game would be modified. Guzzlers would be installed for antelope, sage grouse, and nongame in water deficient areas. Sensitive and threatened or endangered species habitats would be protected through Standard Operating Procedures. This alternative should provide enhanced habitat conditions such that population increases for many wildlife species would be possible.

Rationale

The Preferred Alternative formally recognizes the ecologic nonconsumptive and consumptive values associated with viable populations of diverse species of wildlife and their habitat. Supporting that recognition are accommodations for wildlife by other, potentially competing, resource activities and various habitat improvement efforts. This alternative should provide the enhanced habitat conditions that would make possible population increases for many wildlife species.

The Preferred Alternative addresses the issues of livestock and wildlife forage designations (4.b), wildlife habitat management (5.a,b,c), restrictions on forestry to protect wildlife habitat (3.b), and restrictions on mineral activities to protect wildlife habitat (2.b).

WATERSHED

Under the Preferred Alternative, 1,494 acres of watershed presently in unsatisfactory condition would be improved through monitoring and livestock grazing use modifications. Approximately 15.5 miles of perennial stream riparian area would be improved by fencing to exclude livestock. Timber harvest roads would be closed except for forestry and fire management purposes following completion of timber harvest activities to mitigate the adverse impacts of timber harvesting on watersheds and water quality.

Rationale

The Preferred Alternative recognizes that water and water-related resources in the area are of great importance to both public and private lands. Supporting that recognition are mitigation efforts for water and watershed by other, potentially competing, resources. This alternative should maintain or slightly improve riparian and watershed conditions such that benefits associated with healthy riparian areas and watersheds (improved wildlife, fisheries, recreation, water quality, and flood control) could be maintained or improved.

The Preferred Alternative addresses the issues of riparian degradation due to overuse by livestock (6.a), watershed degradation caused by timber harvest practices (6.b), and overgrazing by livestock on highly erosive, low elevation rangeland (6.c).

FISHERIES HABITAT MANAGEMENT

The Preferred Alternative would improve fisheries habitat on 3.0 miles of McDevitt Creek and improve water quality on 2.25 miles of Sevenmile Creek. A total of 94.7 miles of stream would be managed to maintain fisheries habitat in its present condition.

Rationale

The Preferred Alternative recognizes the importance of the aquatic/riparian habitat along 5.5 miles of perennial stream that would be improved. The other 94.7 miles would remain in an overall static trend. This addresses planning issue 6.a and 4.c.

SOILS

Issue 6.c asks, "How should the problem of early spring turnout and overgrazing by livestock on highly erosive, low elevation rangeland be handled?" The Preferred Alternative would establish lower stocking rates, implement more range improvements, and improve livestock distribution. The improved distribution would lead to improvement of the poor and fair ranges (20,200 acres), thus reducing the erosion potential on these areas. The better distribution would lessen, but not eliminate, the impact of grazing and wildlife on the bentonite badlands areas (5,028 acres).

RECREATION

Recreation use varies in direct proportion to the national economy, river water levels, big game seasons, and anadromous fish runs. Principal uses include hunting, fishing, off-road vehicle (ORV) use, river running, and sightseeing. The Preferred Alternative would continue the designation of three special recreation management areas: the Salmon River, Continental Divide Trail, and Lewis and Clark Trail. Recreation sites would be developed at two locations. Mineral entry withdrawals, no-surface-occupancy restrictions, and other use restrictions would be used in developed recreation sites and special recreation management areas. The Preferred Alternative would leave 93 percent of the area open to ORV use. There would be 14,796 acres closed to ORV use, and 16,230 acres would have a seasonal (winter) use limit.

Rationale

The development and protection of recreation sites and nationally designated trails would help meet the projected demand for recreation in the area. There has been an increasing demand for recreation opportunities along the Salmon River. The special recreation management area designations would provide for more detailed planning so that most uses could be accommodated. The closure of 14,796 acres to ORV use is required for the area recommended for wilderness (if designated by Congress).

This alternative designates open, limited and closed ORV areas in response to Issue #8 and provides specific management direction for existing recreational facilities and nationally significant areas in response to Issue #7.

WILDERNESS

Within the Eighteenmile Wilderness Study Area (WSA), 14,796 acres would be recommended for wilderness designation and 10,126 acres for nonwilderness uses under the Preferred Alternative.

Rationale

The area recommended for wilderness designation contains the heart of the WSA, including all of the primitive and most of the semi-primitive nonmotorized lands. This area is manageable as wilderness, little influenced by past land uses, and borders a portion of the Italian Peaks Roadless Area recommended for wilderness by the U.S. Forest Service.

The area recommended for nonwilderness is a narrow strip adjacent to several mining areas that has been more affected by nearby past uses than the rest of the WSA. Management of this narrow strip of land as wilderness would be difficult. Adjacent Forest Service lands are not recommended for wilderness designation.

This alternative offers a reasonable response to the issue of wilderness suitability (Issue #9).

FIRE MANAGEMENT

The Preferred Alternative would provide for full suppression on 444,770 acres and limited suppression only on isolated tracts. A total of 14,796 acres would be managed under the suppression restrictions within the WSA. A hazard reduction program would be conducted on 10,000 acres. Prescribed fires would be used to treat 30,078 acres to improve forage and wildlife habitat.

Rationale

Prescribed fire is an economical means of carrying out brush control and other vegetative manipulation projects. The WSA has certain criteria that state what type of suppression actions can be taken in that area. Hazard reduction is a means of removing fuel loading in areas that have the potential, if a fire starts, to support a disastrous fire.

CULTURAL RESOURCES

The Preferred Alternative would protect and preserve documented prehistoric and historic sites. Cultural resource management plans would be prepared for five areas, including the Chief Tendoy Cemetery, the Salmon River, and the Lewis and Clark Trail. Management plans would guide the use and protection of significant cultural, natural history, and paleontological resources under BLM administration. The cultural resources standard operating procedures would be applied to protect cultural resources.

Rationale

The Lemhi Resource Area's cultural resources are fragile, nonrenewable resources. They have significant socio-cultural values as well as excellent archaeological research potential. The Preferred Alternative recognizes the nature and significance of these resources and would recommend protective and interpretive measures. The Bureau is required by law to protect the cultural resources on the public lands. Cultural resource protection and use would remain consistent and compatible with other public land resource uses and activities. The standard operating procedures would help protect cultural resources throughout the planning area. This alternative addresses management concern #2, which was identified during the scoping process.

STANDARD OPERATING PROCEDURES

The following management guidance applies to, and is a part of, the Proposed Management Prescription as well as all alternatives considered in detail in Part II. All Standard Operating Procedures (SOPs) are based on existing laws, regulations, and policy.

Allowable Uses

The public lands will be managed under the principles of multiple use and sustained yield as required by the Federal Land Policy and Management Act (FLPMA). Any valid use, occupancy, or development of the public lands that conforms with the RMP will be considered. Those uses, including rights-of-way, leases, and permits, will be subject to environmental review and may require limitations or stipulations to protect and preserve natural resources. Limitations may also be imposed on either the type or intensity of use, or both, because of environmental values, hazards, or special management considerations. Some limitations have already been identified for specific areas. These are included in the land use allocations and management objectives in this land use plan.

Coordination With Other Agencies, State and Local Governments, and Indian Tribes

BLM will ensure that the detailed management plans and individual projects resulting from the RMP are consistent with officially adopted and approved plans, policies, and programs of other agencies, state and local governments, and Indian Tribes. Cooperative agreements and memoranda of understanding will be developed as needed to promote close cooperation between BLM and other federal agencies, state and local governments, and Indian Tribes.

Air Quality

Under the Clean Air Act (as amended, 1977), BLM-administered lands were given a Class II air quality classification, which allows moderate deterioration associated with moderate, well-controlled industrial and population growth. BLM will manage all public lands as Class II unless they are reclassified by the state as a result of the procedures prescribed in the Clean Air Act (as amended, 1977). Administrative actions on the public lands will comply with the air quality classification for that specific area.

Lands

Land Ownership Adjustments

Objectives for acquiring public lands are discussed under activity needs within the alternatives. Site-specific decisions regarding land ownership adjustments in the resource area will be made based on whether the lands are needed for Bureau programs or are considered more valuable for other purposes. The following criteria will be applied to site-specific determinations for lands that are within transfer areas:

1. Public resource values, including but not limited to:

    a. threatened, endangered, or sensitive species habitat
    b. riparian areas
    c. fisheries
    d. nesting/breeding habitat for game animals
    e. key big game seasonal habitat
    f. developed recreation and recreation access sites
    g. class A scenery
    h. municipal watersheds
    i. energy and mineral potential
    j. sites or places eligible for inclusion on the National Register of Historic Places
    k. wilderness areas and areas being studied for wilderness
    l. other designations authorized by law

2. Accessibility of the land for public uses

3. Amount of public investment in facilities or improvements and the potential for recovering that investment

4. Difficulty or cost of administration (manageability)

5. Suitability of the land for management by another federal agency

6. Significance of the decision in stabilizing business, social, and economic conditions and/or lifestyles

7. Encumbrances, including, but not limited to, Recreation and Public Purposes leases, withdrawals, and other leases or permits

8. Consistency of the decision with cooperative agreements and plans or policies of other agencies

9. Suitability, and need for change in land ownership or use, for purposes including, but not limited to, community expansion or economic development such as industrial, residential, or agricultural (other than grazing) development.

The land ownership adjustment criteria identified above will be considered in land reports and environmental analyses prepared for specific adjustment proposals.

Retention Areas

Public land within retention areas generally will remain in public ownership and be managed by the BLM. Transfers to other public agencies will be considered where improved management efficiency would result. Recreation and Public Purpose application will be considered on all public lands except those lands of national significance. Land exchange proposals will be considered on all public lands. However, these proposals must be in the public interest, which will be determined by site-specific application of the land ownership adjustment criteria.

Transfer Areas

Public land within transfer areas generally will be made available for disposal through sales, exchanges, or desert land entry. Some land may be retained in public ownership based on site-specific application of the land ownership adjustment criteria.

Exchanges

Land to be acquired by BLM through exchanges generally should be located in the retention areas. In addition, acquisition of such land should:

1. Facilitate access to public lands and resources

2. Maintain or enhance important public values and uses

3. Maintain or enhance local social and economic values

4. Improve management efficiency through the elimination of isolated tracts and the blocking up of public lands

5. Facilitate implementation of other aspects of the Lemhi RMP

Sales

Public land to be sold must meet one or more of the following criteria derived from Section 203(a) of the Federal Land Policy and Management Act of 1976:

1. The land must be difficult and uneconomic to manage as part of the public lands and must not be suitable for management by another federal department or agency.

2. The land must have been acquired for a specific purpose and must no longer be required for that or any other federal purpose.

3. Disposal of the land will serve important public objectives that can be achieved prudently or feasibly only if the land is removed from public ownership, and these objectives outweigh other public objectives and values that would be served by maintaining the land in federal ownership.

Sale will be the preferred method of disposal when:

1. It is required by national policy.

2. The level of interest in a specific tract indicates that competitive bidding is desirable for reasons of fairness.

3. Disposal through exchange is not feasible.

Agricultural Development

Public land identified for agricultural development must meet all of the following criteria:

1. Each 40-acre parcel in an application must contain at least 40 percent of SCS capability Class I, II, or III soils.

2. The land must be lower than 6,350 feet in elevation.

3. The land must meet the requirements of the Desert Land Act of March 3, 1877, as amended.

Unauthorized Use

It is BLM policy to identify, abate, and prevent unauthorized use of public lands. Existing unauthorized uses of public land will be resolved either through termination, temporary authorization by short-term permit, issuance of rights-of-way, leasing through the Recreation and Public Purposes Act, sale, exchange, or other appropriate manner.

Utility/Rights-of-Way (ROW) Avoidance

Utility and transportation development may be permitted based on consideration of the following criteria:

1. Type of and need for the proposed facility
2. Conflicts with other existing or potential resource values and uses
3. Availability of alternatives and/or mitigation measures

Land Use Authorizations

Land use permits under Section 302 of the Federal Land Policy and Management Act may be used as an interim management measure for resolving unauthorized use problems prior to a final land use/status determination, and for one-time uses of short duration. Leases will be used as a longer-term (5 to 10 years) interim management tool, particularly where future disposal or dedication to another particular land use is contemplated. The latter may allow for agricultural use on an area that may also be needed for future communication sites, as a materials source, or for community expansion needs.

Cooperative agreements, under certain circumstances, may be reached with other federal entities for uses that are not appropriately covered by a right-of-way or a withdrawal. Flood control and aquifer recharge areas may be most appropriately covered by cooperative agreements.

Withdrawals and Classifications

It is BLM policy to review all withdrawals on and classifications of public lands by October 20, 1991. This includes a review of approximately 6,180 acres of various withdrawals as well as review of the Classification and Multiple Use Act (I-1639) that will involve approximately 422,578 acres of public land. Review of these latter acres is to be complete by the end of September 1987.

The multiple use classification will be reviewed through the planning process and a decision will be made to cancel or continue the classification, either in whole or in part, based on the transfer and retention areas.

Access

All existing public access routes will be reserved if the lands are transferred out of public ownership. Easements will be obtained across private property as needed for general public use and public land management by BLM.

Energy and Minerals

Oil and Gas Leasing

Oil and gas leasing is presently covered by a district-wide environmental assessment, which is incorporated in this RMP.

As a general rule, public lands within the resource area are available for oil and gas leasing. In many areas, oil and gas leases will be issued with only the standard stipulations. In other areas, leases will have special stipulations attached to them at the time of issuance to protect seasonal wildlife habitat or other sensitive resource values. In highly sensitive areas, where special stipulations do not provide adequate protection for important surface resource values, portions of the lease, or the entire lease, will be issued with a "no-surface-occupancy" stipulation.

This analysis assumes that horizontal deviations of up to 1,500 feet are feasible with current directional drilling techniques. However, because of the high cost of directional drilling, such operations would not be anticipated unless there is high potential for a discovery.

The general areas where standard, special, and "no-surface-occupancy" stipulations would apply vary by alternative and are shown on the alternative maps. During any given year, the authorized officer could waive the special restrictions if actual conditions did not warrant them.

Geothermal Leasing

Geothermal resource leasing is covered by a district-wide environmental assessment at the present time, and this assessment is incorporated in the RMP. Lease applications will continue to be processed as received. Stipulations developed during the preparation of the district-wide environmental assessment will be attached to the leases prior to issuance. Specific proposals for prelease exploration or operation on leases will be reviewed by an interdisciplinary team. This review process will result in a site-specific environmental assessment of the proposal and may include additional special stipulations necessary to protect other resources. Seasonal or no-surface-occupancy stipulations for oil and gas leasing apply also to geothermal leasing in the same specified areas.

Non-Energy Mineral Leasing

Prospecting permits and lease applications will be reviewed by an interdisciplinary team and environmental assessments will be prepared for each proposed action. These assessments will develop any special stipulations necessary for the protection of other surface resources. A phased approach will be used, with site-specific analysis of a proposed activity following the analysis completed for permit issuance. The only known potential for hardrock leasing is in the Hawley Creek area; an environmental assessment has been completed for Hawley Creek, with a recommendation for issuance of prospecting permits.

Coal Leasing

In this RMP, coal leasing is not considered as an issue because the potential for commercial development appears very low. Applications for coal prospecting permits or coal leases will be evaluated when received. Preliminary applications of the "Coal Suitability Criteria" indicate that not all lands identified as having coal potential are suitable for leasing.

Locatable Minerals

Mineral exploration and development on public land will be regulated under 43 CFR 3800 to prevent unnecessary and undue degradation of the land. BLM will conduct valiidity examinations, checking mining claims to determine whether a claimant has established any right to the mineral resources, under the following conditions:

1. Where a mineral patent application has been filed and a field examination is required to verify the validity of the claim(s)

2. Where there is a conflict with a disposal application and it is deemed in the public interest to do so, or where the statute authorizing the disposal requires the removal of mining claims that are not valid. If the validity examination showed that the mining claim was valid, the disposal action could not be completed.

3. Where the land is needed for a federal program

4. Where a mining claim is located under the guise of the mining law and flagrant unauthorized use of the land or mineral resource is occurring

Withdrawals from mineral entry will be used only where there are significant resource values that cannot be adequately protected under the surface management regulations. This would include areas recommended for wilderness designation, important historical and cultural resources, and recreational developments.

Public land will be reopened to mineral entry where mineral withdrawals are revoked through the withdrawal review process.

Salable Minerals (Common Variety)

Applications for the removal of common variety mineral materials will be processed using the standards developed in this RMP and the restrictions developed for each alternative. Since most disposals within the resource area are generally under the 100,000 ton or cubic yard threshold, the Categorical Exclusion Review process for critical resources will be used; an environmental assessment need not be prepared. Community pits will be designated where there is sufficient demand to open new material sites.

Disposals to state, county, and municipal governments will generally be handled through issuance of free use permits rather than establishment of mineral material sites.

Forest Management

General Forest Management and Planning

The suitable timber production base, as determined by the Timber Production Capability Classification inventory, will be subject to the specific restrictions and withdrawals required by this RMP. These RMP actions further refine the timber base to those acres available for sustained yield production of forest products. All lands within the available timber production base will be considered for scheduled timber harvesting and subject to a variety of forest development activities.

Restrictions placed on the available timber base because of concerns for other resource values (wildlife, recreational use, etc.) will not rule out intensive forest management and planned timber harvest. However, any loss in timber yield resulting from these restrictions will be taken into consideration in future allowable cut computations.

Any commercial forest lands set aside are withdrawn from the timber production base will not be available for scheduled timber harvesting. This acreage will not be included in allowable cut calculations. However, these set aside stands, along with those classified as woodland, will be subject to limited forest management activities such as logging road right-of-ways, salvage operations, and firewood cutting. Any volumes of timber removed from these lands will not be used to satisfy allowable cut levels.

Timber Harvesting and Silvicultural Treatments

Methods of harvest will include clearcutting and shelterwood systems. Clearcutting will be utilized in predominantly lodgepole pine stands, with limited use in Douglas-fir to control dwarf mistletoe infestations. Clearcuts will be limited to 40 acres and will be irregularly shaped to minimize wildlife escape distances and blend into the surrounding landscape.

Timber marking prescriptions will concentrate on genetic improvement of the regenerated stand and will be designed primarily to encourage natural regeneration.

Natural regeneration will be the primary method of reforestation except where an area has been depleted or heavily affected by insects, disease, fire, or other natural catastrophe. Artificial reforestation or site preparation will be considered when natural regeneration does not occur within five years after harvest. The backlog of harvest areas without adequate regeneration stocking levels will also be planted or scarified as forest development funds become available.

Tractor skidding will be restricted to slopes of 45 percent or less in the volcanic, granitic, and sediment land types. Skidding on quartzite soils will be allowed on slopes up to 60 percent. One exception to the 45 percent restriction would be on small areas of convex slopes with inadequate deflection for cable yarding. Some limited skidding activity on slopes up to 60 percent would be allowed in these areas.

Slash treatments will vary with the specific harvesting system and the silvicultural objectives for the stand. Most Douglas-fir harvest units will require lop and scatter slash disposal with some piling of large concentrations at landings. Lodgepole pine slash treatments will vary between lop and scatter and piling depending on cone serotiny and stand objectives. All burning of slash will be conducted by BLM personnel in conformance with state air quality guidelines.

All skid trails will be cross-drained with the construction of water bars upon completion of skidding operations.

All harvest units susceptible to livestock damage will be protected by grazing closures or fencing until such time as regeneration becomes stocked and established.

At least three nonhazardous snags per acre will be left in shelterwood harvest units for nongame wildlife use. In the absence of sufficient numbers of nonhazardous snags, some large culls will be substituted.

Seasonal harvest restrictions and road closures will be imposed to protect soils, watershed, and wildlife values during critical periods.

No firewood cutting permits will be issued in cottonwood/aspen and associated riparian areas/drainages except as part of a special vegetation management project designed to encourage sprouting and regeneration of the stand.

Range

Allotment Categorization

All grazing allotments in the resource area have been assigned to one of three management categories--M (maintain), I (improve), and C (custodial)--based on present resource conditions, potential for improvement, and management objectives. The M category allotments generally will be managed to maintain current satisfactory resource conditions, I category allotments generally will be managed to improve resource conditions, and C category allotments will receive custodial management while protecting existing resource values.

Allotment-Specific Objectives for the Improvement Category

Multiple use management objectives have been developed for each allotment in the I category (see Appendix B). Future management actions, including approval of allotment management plans, will be tailored to meet these objectives. However, the priorities assigned to achieving sometimes conflicting objectives for wildlife habitat, watershed, vegetation condition, and livestock forage production differ between alternatives.

Implementing Changes in Allotment Management

Activity plans are commonly used to present, in detail, the types of changes required in an allotment and to establish a schedule for implementation. Actions set forth under the AMP that affect the environment will be analyzed and compared to alternative actions. During the analysis, the proposal may be altered or completely revamped to mitigate adverse impacts. The following sections contain discussions of the types of change likely to be recommended in an activity plan and the guidance that applies to these administrative actions.

Livestock Use Adjustments

Livestock use adjustments are made by changing one or more of the following: the season of use, the number of head, or the pattern of grazing. For each of the alternatives presented in this RMP, target stocking rates have been set for each allotment (refer to Appendix B). While most livestock use adjustments will occur in the I allotments, use adjustments are permitted for allotments in categories C and M.

In reviewing the target stocking rate figures and other recommended changes, it is emphasized that the target animal unit month (AUM) figures are not final stocking rates. All livestock use adjustments will be implemented through documented mutual agreement or by decision. When adjustments are made through mutual agreement, they may be implemented once the Rangeland Program Summary has been through a public review period. When livestock use adjustments are implemented by decision, the decision will be based on operator consultation, range survey data, and monitoring of resource conditions. Current BLM policy emphasizes the use of a systematic monitoring program over a period of years to verify the need for livestock adjustments proposed on the basis of one-time inventory data.

Monitoring will also be used to measure the changes brought about by new livestock management practices and to evaluate the effectiveness of management changes in meeting stated objectives. Detailed guidance for rangeland monitoring is available in current BLM policy and guidance.

The federal regulations that govern changes in allocation of livestock forage provide specific direction for livestock use adjustments implemented by decision. The regulations specify that permanent increases in livestock forage or suspensions of preference "shall be implemented over a five-year period...." The regulations do provide for adjustments to be implemented in less than five years when (1) an agreement is reached to implement the adjustment in less than five years or (2) a shorter implementation period is needed to sustain resource productivity.

Temporary Suspensions and Closures

Temporary suspensions of grazing use or closures of all or portions of allotments may be implemented to protect the public lands because of drought, fire, flood, or insect infestation. When conditions such as fire, flood, or insect infestation create a significant impact on the normal operation of a grazing operator, efforts to mitigate the impact will be taken by BLM. These mitigating efforts may consist of relocation of grazing use, modification of grazing systems, and granting of temporary nonrenewable grazing use in other allotments under permit or lease. No action will be taken by BLM prior to consultation and coordination with affected permittees or lessees and other affected parties.

Range Improvements and Treatments

Typical range improvements and treatments and the general procedures to be followed in implementing them are described in Appendix B. The extent, location, and timing of such actions will be based on the allotment-specific management objectives adopted through the resource management planning process, interdisciplinary development and review (to include the Idaho Department of Fish and Game) of proposed actions, operator contributions, and BLM funding capability. Since some of the soils in the resource area may be unsuitable for range improvement projects, proposed projects will be investigated for feasibility prior to approving location and design plans.

All allotments in which range improvement funds are to be spent will be subjected to an economic analysis. The analysis will be used to develop a final priority ranking of allotments for spending range improvement funds that are needed to carry out activity plans. The highest priority for implementation generally will be assigned to those improvements for which the total anticipated benefits exceed costs. Generally, all structural range improvements will be maintained by the benefitting party(s). All nonstructural range improvements will be maintained by BLM.

Noxious weed control will be considered under all alternatives. Individual sites and species (i.e., larkspur, Canadian thistle, leafy etc.) will be handled on a case-by-case basis through the environmental assessment (EA) process. Where biological controls have proven to be effective, they will be used in preference to chemical or mechanical methods.

Grazing Systems

The type of system to be implemented will be based on consideration of the following factors:

1. Allotment-specific management objectives (see Appendix B)

2. Resource characteristics, including vegetation potential and water availability

3. Operator needs

4. Implementation costs

Typical grazing systems available for consideration are described in Appendix B.

Unleased or Unpermitted Tracts

Unleased or unpermitted tracts generally will remain available for further consideration for authorized grazing, as provided for in the current BLM grazing regulations. However, certain tracts currently closed or restricted to grazing use will remain so.

Wildlife and Fisheries Program

General

Fish and wildlife habitat will continue to be evaluated on a case-by-case basis as a part of project-level planning. Such evaluation will consider the significance of the proposed project and the sensitivity of fish and wildlife habitat in the affected area. Stipulations will be attached as appropriate to assure compatibility of projects with management objectives for fish and wildlife habitat. Habitat improvement projects will be implemented where necessary to stabilize or improve unsatisfactory or declining wildlife habitat condition. Such projects will be identified through habitat management plans or multiple resource management activity plans.

Seasonal Restrictions

Seasonal restrictions will continue to be applied where they are needed to mitigate the impacts of human activities (except for leaseable minerals exploration and development) on important seasonal wildlife habitat. The major types of seasonal wildlife habitat and the time periods in which restrictions may be needed are shown in Table 1. Approximately 60 percent (226,000 acres) of the resource area lies within areas potentially subject to restriction. During any given year, the authorized officer may waive seasonal restrictions if actual conditions do not warrant them.

TABLE 1
SEASONAL WILDLIFE RESTRICTIONS

Habitat	Restricted Period
Big Game Winter Range (Deer/Elk/Bighorn)	11/15 - 03/15
Elk Rut Areas	08/15 - 10/01
Elk Calving Areas	04/30 - 06/30
Raptor Nest Sites	Dates vary by species
Sage Grouse Strutting Grounds	03/01 - 04/30
Sage Grouse Nesting & Broodrearing	04/30 - 06/30
Antelope Fawning Grounds	05/01 - 06/30
Antelope Winter Ranges	11/15 - 03/15

Threatened, Endangered, and Sensitive Species Habitat

Whenever possible, management activities in habitat for threatened, endangered, or sensitive species will be designed to benefit those species through habitat improvement.

The Idaho Department of Fish and Game and the U.S. Fish and Wildlife Service will be consulted prior to implementing projects that may affect habitat for threatened and endangered species. If a "may affect" situation is determined through the BLM biological assessment process, consultation with the U.S. Fish and Wildlife Service will be initiated in accordance with Section 7 of the Endangered Species Act of 1973, as amended. All activities occurring within the interagency wolf coordination zone (east of Idaho Highway 28 between Kenny Creek and Eighteenmile Creek) will be subject to Section 7 consultation.

Terrestrial Wildlife Habitat

Sufficient forage and cover will be provided for wildlife on seasonal habitat. Forage and cover requirements will be incorporated into allotment management plans and will apply to specific areas of primary wildlife use.

Range improvements generally will be designed to achieve both wildlife and range objectives. Existing fences will be modified and new fences will be built so as to allow wildlife passage. Water developments generally will not be established for livestock where significant conflicts with wildlife for vegetation would result.

Vegetation manipulation projects will be designed to minimize impact on wildlife habitat and to improve it whenever possible. These projects will comply with sage grouse, antelope, and mule deer management guidelines. The Idaho Department of Fish and Game will be consulted two years in advance on all vegetation manipulation projects. Animal control programs will be coordinated with the U.S. Fish and Wildlife Service.

Management actions within floodplains and wetlands will include measures to preserve, protect, and, if necessary, restore their natural functions (as required by Executive Orders 11988 and 11990 and BLM Manual 6740). Management techniques will be used to minimize the degradation of stream banks and the loss of riparian vegetation. Bridges and culverts will be designed and installed to maintain adequate fish passage.

Riparian habitat needs will be taken into consideration in developing livestock grazing systems and pasture designs. Some of the techniques that can be used to lessen impacts are:

1. Constructing shade structures in conjunction with water development away from riparian areas
2. Using prescribed fire to draw cattle away from riparian zones
3. Changing class of stock from cow/calf pairs to herded sheep or yearlings
4. Eliminating hot season grazing or scheduling hot season grazing for only one year out of every three
5. Locating salt away from riparian zones
6. Laying out pasture fences so that each pasture has as much riparian habitat as possible
7. Locating fences so that they do not confine or concentrate livestock near the riparian zone
8. Developing alternative sources of water to lessen the grazing pressure on the riparian habitat
9. Using temporary electric fencing
10. Excluding livestock completely from riparian habitat as a last resort by using protective fencing

Forestry Activities

Where applicable, the elk management guidelines contained in Elk Habitat Relations for Central Idaho (Ralphs, 1981) will be followed. These include:

1. Managing public vehicle access to maintain the habitat effectiveness of security cover and key seasonal habitat (such as winter range and calving/nursery areas) for deer and elk
2. Maintaining adequate untreated peripheral zones around important moist sites (for example, wet sedge meadows, springs, and riparian zones)

3. Ensuring that slash depth inside clear cuts does not exceed 1 1/2 feet

4. Generally discouraging thinning immediately adjacent to clear cuts

Fencing

To the extent possible, fences will be located and constructed to maximize their visibility, to take advantage of flat areas (benches, saddles, etc.), and to cross contour lines.

Existing fences posing a potential or known problem to big game movement will be modified as necessary.

All new fence construction will comply with the Lemhi Resource Area fencing policy dated May 20, 1983 (see Appendix B).

Water Development

1. Free water for use by wildlife shall be maintained at or within 1/4 mile of all spring developments. This water shall remain available for at least as long a period as predevelopment conditions provided.

2. Adequate water shall remain at spring developments to maintain any associated riparian zone.

3. Height of troughs or other water containers shall not exceed 20 inches above ground level.

4. Bird ladders or other appropriate wildlife escape devices will be installed and maintained in all water troughs.

5. As appropriate, pipelines and troughs will remain charged with water from June 15 to October 1 to provide for wildlife that has become dependent upon them. Maintenance of these projects will be negotiated between BLM, Idaho Department of Fish and Game, and the permittee.

Vegetation Manipulation

1. The Idaho Department of Fish and Game shall be given at least two year's notice prior to any vegetation manipulation project.

2. Brush control projects will be designed to maximize edge effect to the extent possible. Islands of untreated sagebrush will be incorporated into project design as necessary to provide cover for sage grouse and other species.

3. Proposed brush manipulation projects on sage grouse winter and/or nesting range or antelope winter and/or fawning range must have a predicted neutral or beneficial effect on these species.

   a. The sagebrush canopy cover will not be reduced below 10 percent on sage grouse broodrearing areas.

   b. The sagebrush canopy cover will not be reduced below 20 percent on sage grouse nesting and wintering areas.

   c. The sagebrush canopy cover will not be reduced below 10 percent on general antelope ranges. Winter ranges and spring fawning areas will not be treated unless overall benefits to antelope will result.

4. Brush control proposals within 2 miles of known strutting grounds will be subject to on-site inspection by BLM and Idaho Department of Fish and Game personnel to determine prohibited areas.

5. As a rule, no brush control will be allowed within 100 yards of streams, meadows, or secondary drainages (dry and intermittent). The desirability of increasing or decreasing the width on specific areas will be determined via on-site evaluation by BLM and Idaho Department of Fish and Game personnel.

6. A complex mixture of grasses, forbs, and shrubs (if appropriate) will be used in all range rehabilitation or improvement projects.

Soil, Water, and Air

General

Soil, water, and air resources will continue to be evaluated on a case-by-case basis as a part of project level planning. Such an evaluation will consider the significance of the proposed projects and the sensitivity of the resources. Stipulations will be attached as appropriate to prevent adverse impacts to soil, water, and air.

Soils

Adequate cover will be maintained to keep soil erosion within tolerable limits. Recent research suggests the soil loss tolerance figure for rangeland is 1.0 ton per acre per year (personal communication with Agricultural Research Service staff).

Water

Water quality will be maintained or improved in accordance with state and federal standards. State agencies will be consulted on proposed projects that may significantly affect water quality. Management actions on public land within municipal watersheds will be designed to protect water quality and quantity.

All BLM initiated or authorized programs and actions potentially affecting wetland-riparian areas will comply with the spirit and intent of Executive Order 11990 (Wetlands Act) and BLM Policy as put forth in BLM Manual Section 6740.06. These directives stress the avoidance of (1) "...longand short-term adverse impacts associated with the destruction, loss, or degradation of wetland-riparian areas" and (2) the preservation and enhancement of "the natural and beneficial values of wetland-riparian areas which may include constraining or excluding those uses that cause significant, long-term ecological damage."

Roads and utility corridors will avoid riparian zones to the extent practicable.

Recreation

Recreation Opportunities

A broad range of outdoor recreation opportunities will continue to be provided for all segments of the public, depending on demand. Trails and other means of public access will continue to be maintained and developed where necessary to enhance recreation opportunities and allow public use. Developed recreation facilities receiving the heaviest use will receive first priority for operation and maintenance funds. Sites that cannot be maintained to acceptable health and safety standards will be closed until deficiencies are corrected. Investment of public funds for new recreation developments will be permitted only on land identified to remain in public ownership.

Recreation resources will continue to be evaluated on a case-by-case basis as a part of project-level planning. Such evaluation will consider the significance of the proposed project and the sensitivity of recreation resources in the affected area. Stipulations will be attached as appropriate to assure compatibility of projects with recreation management objectives.

Motorized Vehicle Use

Travel planning, including the designation of areas open, restricted, and closed to motorized vehicle access, will remain a high priority for public land. Public land within areas identified as open to motorized vehicle use generally will remain available for such use without restrictions. Exceptions to this general rule may be authorized after consideraction of the following criteria:

1. The need to minimize damage to soil, watershed, vegetation, or other resource values

2. The need to minimize harassment of wildlife or significant degradation of wildlife habitats

3. The need to promote user safety

Public land within areas currently having motorized vehicle use restrictions generally will receive priority attention during travel planning. Specific roads, trails, or portions of such areas may be closed seasonally or yearlong to all or specified types of motorized vehicle use.

Public land within areas closed to motorized vehicle use will be closed yearlong to all forms of motorized vehicle use except emergency or authorized vehicles.

Restrictions and closures will be established for specific roads, trails, or areas only where problems have been identified. Areas not designated as restricted or closed will remain open for motorized vehicle use.

Visual Resources

Visual resources will continue to be evaluated as a part of activity and project planning. Such evaluation will consider the significance of the proposed project and the visual sensitivity of the affected area. Stipulations will be attached as appropriate to maintain designated visual resource management classes.

Wilderness Resources

The Eighteenmile Wilderness Study Area (WSA) will continue to be managed in compliance with the Interim Management Policy until it is reviewed and acted upon by Congress. If all or part of this area is designated as wilderness by Congress, it will be managed under BLM's Wilderness Management Policy. A site-specific wilderness management plan will be developed to guide future management.

If all or part of the Eighteenmile WSA is not designated as wilderness, it will be managed under the multiple use guidelines set forth in this RMP.

Wild and Scenic River Area

The Salmon River from North Fork to its headwaters has been identified as a potential Wild and Scenic Study River. The area will continue to be managed to prevent unnecessary and undue degradation until it is reviewed and acted upon by Congress.

Fire

The primary fire protection objective will continue to be the control of all wildfires on or threatening public land during the first burning period. Upon completion and approval of the RMP, activity plans will be completed to accomplish the direction of the RMP guidance.

The resource area has many scattered talus mountain tops with lone or scattered trees. These would be limited suppression areas. However, each public report on a fire would have to be checked to make sure the fire was not spreading or sliding down into adjacent fuels. If found to be safe, a fire would be monitored and allowed to burn out unless too many reports were received from residents or tourists.

Fire suppression within the Eighteenmile Wilderness Study Area will follow the Interim Management Policy until the area is designated wither as wilderness or nonwilderness by Congress.

Prescribed burning will continue to be used in support of resource management objectives.

Cultural Resources

BLM is required to identify, evaluate, and protect cultural resources on public lands under its jurisdiction and to ensure that Bureau initiated or Bureau authorized actions do not inadvertently harm or destroy nonfederal cultural resources. These requirements are mandated by the Antiquities Act of 1906, the Reservoir Salvage Act of 1960 as amended by P.L. 933-191, the National Historic Preservation Act of 1966 and amendments, the National Environmental Policy Act of 1969, Executive Order 11593 (1971), Section 202 of the Federal Land Policy and Management Act of 1976, and the Archeological Resources Protection Act of 1979, together with 36 CFR 800.

Prior to starting any Bureau initiated or authorized action that involves surface disturbing activities, sale, or transfer from Federal management, BLM will conduct, or cause to be conducted, a Class III (intensive) inventory as specified in BLM Manual Section 8111.4. This intensive inventory supplements previous surveys and will be done to locate, identify, and evaluate cultural resource properties in the affected areas. If properties that may be eligible for the National Register are discovered, BLM will consult with the State Historic Preservation Officer (SHPO) and forward the documentation to the Keeper of the National Register to obtain a determination of eligibility in accordance with 36 CFR Part 63.

Since any Bureau authorized or initiated action recognizes and accommodates cultural resources by virtue of standard operating procedures, the only activity that may damage these resources is unplanned public use. Such activities include unauthorized recreational vehicle use, artifact collection, and illegal excavation for materials and antiquities. The location of these activities is impossible to predict and may occur in spite of measures designed to exclude or limit them.

Cultural resource values discovered in a proposed project or authorized action area will be protected by adhering to the following methods.

1. Avoidance. Cultural resources would be protected by redesigning or relocating the project or excluding significant cultural resource areas from development, use, or disposal.

2. Salvaging. If a project cannot be redesigned or relocated, cultural resource values will be salvaged through controlled, scientific methods pursuant to the SHPO agreement.

3. Project/Action Abandonment. If the site is determined to be of significant value or the above-mentioned methods are not considered adequate, the project will be abandoned.

All cultural sites identified as special management areas will be closed to off-road vehicle use, vegetation manipulation, and surface occupancy.

All cultural sites known to be eligible for National Register nomination or listed on the National Register will be protected from deterioration and be retained in federal ownership.

Cemetery areas or known concentrations of burials will be closed to livestock grazing. Known cemeteries or concentrations of burials will be withdrawn from mineral entry. No surface occupancy will be stipulated for known cemeteries or concentrations of burials.

Paleontological Resources

Paleontological resources will be managed to protect specimens and maintain or enhance sites or areas for their scientific and educational values.

The potential impacts to the paleontologic resources of the Lemhi Resource Area are unknown as an inventory has not yet been completed. Once an inventory is completed and site clearances become standard practice, the resource will be adequately protected.

Cadastral Survey

Cadastral surveys will continue to be conducted in support of resource management programs. Survey requirements and priorities will be determined on a yearly basis as a part of the annual work planning process.

Road and Trail Construction and Maintenance

Road and trail construction and maintenance will continue to be conducted in support of resource management objectives. Construction and maintenance requirements and priorities will be determined on a yearly basis as a part of the annual work planning process.

Investment of public funds for road and trail construction generally will be permitted only on land identified for retention in public ownership. Exceptions may be allowed where investment costs can be recovered as a part of land disposal actions.

Specific road and trail construction standards will be determined based on the following criteria:

1. Resource management needs
2. User safety
3. Impacts to environmental values, including but not limited to wildlife and fisheries habitat, soil stability, recreation, and scenery
4. Construction and maintenance costs

Detailed Management Plans

The RMP provides general guidance for the resource area. More detailed management plans called activity plans will be prepared to deal with areas where a greater level of detail is required. Activity plans will indicate specific management practices, improvements, allocations, and other information for a particular site or area. They will be prepared for most major BLM programs, including range (allotment management plans), recreation (recreation area management plans), wildlife (habitat management plans), and cultural resources (cultural resource management plans). Where two or more activities have activity planning needs in the same general area, a single consolidated activity plan may be prepared. Coordination, consultation, and public involvement are important in the formulation of activity plans.

Economic and Social Considerations

BLM will ensure that any management action undertaken in connection with this plan is cost-effective and takes into account local social and economic factors. Cost-effectiveness may be determined by any method deemed appropriate by the Bureau for the specific management action involved.

Environmental Review

An environmental analysis or categorical exclusion review will be completed prior to approval of any project involving public lands. If no significant impacts are identified, the analysis will be documented through an environmental assessment and a finding of no significant impact. If the analysis suggests a major federal action that would significantly affect the human environment, an environmental impact statement (EIS) will be prepared under the direction of the BLM Idaho State Director.

SUPPORT REQUIREMENTS

Once the RMP is approved, it will require support from many sources in order to be implemented. Support requirements are shown in Table 2.

TABLE 2
SUPPORT REQUIREMENTS

SUPPORT	RESOURCE	REMARKS
Appraisal	Lands, Forestry, Range Management, Wildlife, Recreation	Appraisals must be conducted on those lands identified for transfer and acquisitions. Also access acquired for timber sales, range and wildlife projects, and recreation developments must be appraised.
Cadastral Survey	Minerals, Wildlife, Range, Lands, Forestry, Wilderness	Identification of public land boundaries may be required for actions such as: mineral disposal, land transfers, timber sales, range projects wildlife projects, and occupancy trespass settlements.
Access	Forestry, Minerals, Range, Wildlife, Recreaction, Cultural, Watershed	Legal access is required for a number of actions such as: timber sales, mineral disposal, range projects, recreation use, wildlife projects, cultural resource management, and watershed projects.
Water Rights	Watershed, Wildlife, Range	All BLM water developments require water rights.
Engineering	Range, Wildlife, Forestry, Recreation, Wildlife	Engineering design, review, and construction or contract preparation; administration of construction is required for range projects, recreation developments, and road building and maintenance projects

TABLE 2 (cont'd)
SUPPORT REQUIREMENTS

SUPPORT	RESOURCE	REMARKS
Fire Management	Range and Wildlife Habitat Management	Technical assistance is required for preparation of prescriptions for prescribed burning and fire management on prescribed burns designed to improve range and wildlife habitat.
	All	Fire suppression, as specified in the RMP for the protection of resource values and property.

CONSISTENCY WITH OTHER PLANS

This proposed plan does not appear to be inconsistent with the officially adopted plans, programs, or policies of other federal, state or local governments or with Indian tribes. The public comments to date have shown no inconsistencies.

The Lemhi County Comprehensive Plan was reviewed by BLM. The Lemhi Draft RMP is consistent with the Lemhi County plan. Coordination with the U.S. Forest Service, Soil Conservation Service, Lemhi County, city of Salmon, local Lemhi Indians, and Shoshone Bannock tribe does not indicate any inconsistencies.

Agencies, governments, and Indian tribes may notify BLM of inconsistencies with their plans during the 90-day public review period. The final RMP/EIS will document inconsistencies and, if they cannot be remedied, will explain why.

BLM planning regulations provide for a 60-day review by the Governor of BLM's proposed plans or amendments (1610.3-2(e)). The purpose of this review is to give the Governor the opportunity to identify inconsistencies between BLM's proposed plan and state or local plans, policies, or programs. A Memorandum of Understanding (May 3, 1984) with the Office of the Governor has been executed to provide for The Governor's consistency review . In accordance with this Memorandum of Understanding, the BLM has notified the Governor of the Lemhi RMP and will provide the proposed plan and associated final EIS, including BLM's responses to comments on the Draft Plan and EIS, to the Office of the Governor for the 60-day review.

IMPLEMENTATION

Decisions in the plan will be implemented over a period of years and must be tied to the BLM budgeting process. Priorities will be established to guide the order of implementation for each resource and will be reviewed annually to help develop annual work plan commitments for the coming year. New policy, Departmental guidance, or new BLM goals may influence priorities.

Detailed activity plans and environmental assessments may be needed before taking some actions such as timber harvest or range improvement construction. Rangeland improvement projects, for example, will require a site-specific analysis and a review of economic efficiency.

MONITORING AND EVALUATION

The results of implementing the selected RMP will be examined periodically to inform the BLM resource managers and the public of the progress of the plan. The results being achieved under the plan will be compared with the plan objectives.

Monitoring and evaluation will help the resource managers to:

1. Determine whether an action is accomplishing the intended purpose
2. Determine whether mitigating measures are satisfactory
3. Determine if the decisions in the plan are being implemented
4. Determine if the related plans of other agencies, governments, or Indian tribes have changed, resulting in an inconsistency with the RMP
5. Identify any unanticipated or unpredictable effects
6. Identify new data of significance to the plan

The proposed monitoring and evaluation plan for the Lemhi Resource Area RMP is shown in Appendix I. The plan specifies resource components to be monitored and how, when, and where these components will be monitored. Monitoring intensity (the number and frequency of studies) will vary among areas and allotments according to the amount of information that is needed to determine if the plan objectives are being met. If future monitoring shows that important RMP objectives are not being met, the reasons will be examined closely. An RMP decision may need to be changed even if the problem is due to factors beyond BLM's control, such as changes in the climate or economic factors.

PART II

ENVIRONMENTAL IMPACT STATEMENT

Lemhi Resource Management Plan
and
Environmental Impact Statement

(X) Draft ( ) Final

Lead Agency

U.S. Department of the Interior, Bureau of Land Management

Type of Action

(X) Administrative ( ) Legislative

Abstract

This draft resource management plan and environmental impact statement describes and analyzes seven alternative plans for managing 459,566 acres of BLM-administered land in the Lemhi Resource Area of the Salmon District. Alternative A would continue present management. Alternative B favors livestock grazing management. Alternative C emphasizes wildlife, fisheries, wilderness, recreation, watershed protection, and cultural resource management. Alternative D promotes mineral development. Alternative E would intensify forest management. Alternative F, the Preferred Alternative, emphasizes multiple use management. Alternative G provides for management if Congress does not designate the Eighteenmile Wilderness Study Area. This document contains only a draft proposal for wilderness. A separate environmental input statement will be prepared for the Eighteenmile Wilderness Study Area.

This document also serves as the instrument to satisfy the intent of the 1975 U.S. District Court approved agreement (Case 1983-73) between BLM and the Natural Resources Defense Council, et al. in which BLM agreed to consider the impacts of various intensities of livestock grazing in its decision-making process.

For further information, contact:

Jerry A. Wilfong, Area Manager
Bureau of Land Management
Box 430
Salmon, Idaho 83467
Telephone (208) 756-2201

Comments should be submitted to the above address by ____________________.

PART II

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SUMMARY

The Lemhi Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Salmon District Office, with a comprehensive framework for managing 459,566 acres of BLM-administered public land over the next 15 to 20 years. With increasing demands for various resources, prudent stewardship of the public lands can no longer be accomplished without comprehensive land use planning.

The RMP/EIS is divided into three parts.

Part I of this document is the draft plan for the Lemhi Resource Area, Salmon District (see map 1 for location).

Part II of this document is the environmental impact statement portion that deals with the expected environmental impacts associated with several alternatives. Each alternative represents a possible plan for the Lemhi Resource Area. Alternative F is the Preferred Alternative and is the same as the draft plan (Part I).

Part III, Appendixes consist of specific data on which Part I and Part II are based. More detailed information is available for inspection at the Salmon District Office.

The Preferred Alternative reflects BLM's effort to resolve resource conflicts and ensure that the public lands are managed in accordance with principles of multiple uses and sustained yield.

This document contains only a draft proposal for wilderness. A separate Environmental Impact Statement will be prepared for the Eighteenmile WSA.

This document also serves as the instrument to satisfy the intent of the 1975 U. S. District Court approved agreement (Case 1983-73) between BLM and the Natural Resources Defense Council, et al in which BLM agreed to consider the impacts of various intensities of livestock grazing in its decision making process.

Issues

Nine issues are addressed in this document. These issues were identified based on planning team member's judgement, interagency consultation, public input, and review by BLM managers. The issues presented here are those that received major emphasis in the public responses and ones that need a land use decision in the resource management plan.

1. Land Tenure Adjustment

The Issue

How should the disposal or retention of public lands be managed?

2. Energy and Minerals Management

   The Issue

   a. How will energy and mineral resource development be accommodated?

   b. What public land, if any, should be withdrawn from energy and mineral exploration and/or development in order to protect surface and groundwater quality, visual quality, wildlife habitat, and other resource values?

3. Forest Management

   The Issue

   a. What forest lands are available for intensive forest management?

   b. What forest lands should be subject to restricted forest management to protect high recreation, watershed, and wildlife values?

4. Livestock Grazing Management

   The Issue

   a. How should the range resource be managed to meet existing and future livestock demand?
   b. How much and where should forage be designated for livestock and wildlife use?

   c. What special management techniques should be initiated on livestock grazing to improve sensitive areas?

5. Wildlife Habitat Management

   The Issue

   a. How should fisheries habitat and seasonal range for big game and sage grouse be managed?

   b. How should disposal of public lands containing important wildlife habitat be handled?

   c. How should management of habitat for threatened and endangered species be managed?

6. Watershed

   The Issue

   a. How should BLM deal with riparian area degradation due to livestock grazing?

b. How should BLM address water quality and fisheries habitat degradation due to forestry practices?

c. How should the problem of early spring turnout and overgrazing by livestock on highly erosive, low elevation rangeland be handled?

7. Recreation Management

The Issue

a. How should BLM address the overcrowding of existing recreational facilities and the deterioration in the quality of recreational experiences in the Lemhi Resource Area?

b. What management practices should occur within areas of national significance?

8. Off-Road Vehicle (ORV) Management

The Issue

Which areas should be designated as open, limited, and closed?

9. Wilderness Suitability

The Issue

Should the Eighteenmile Wilderness Study Area (WSA), or any portion of the WSA, be recommended for wilderness designation?

Alternatives

Seven alternatives were considered in developing the Lemhi RMP. These alternatives comply with the National Environmental Policy Act and address the issues identified in the resource area. Two alternatives considered but not developed for the RMP were no livestock grazing and no timber harvest.

The seven alternatives are discussed briefly below. The overall theme or emphasis of each is presented first, followed by a summary of management actions and environmental consequences. For the Eighteenmile WSA, implementation of any alternative or resource action that could violate the Interim Management Policy would be delayed until Congress makes a final wilderness designation decision.

The Alternative Summary (Table S-1) illustrates the management actions proposed under the various alternatives.

Alternative A

This alternative represents the existing situation. The present level of management on the public lands would be continued, with measures being taken to prevent or correct deteriorating conditions. Any changes in management would be brought about through monitoring and the environmental analysis process. All actions would be handled on a case-by-case basis.

The Eighteenmile Wilderness Study Area would not be recommended for wilderness designation. The area would be managed for multiple use values.

As defined by BLM policy, Alternative A is the proposed action for livestock grazing.

Management Action Summary

BLM would consider 4,818 acres for transfer from federal ownership through public sales or exchanges. An additional 1,270 acres would be considered for transfer under the Desert Land Act. No lands would be acquired under this alternative except through exchange.

A total of 204,511 acres would be open to oil and gas leasing with standard stipulations, 239,315 acres with seasonal occupancy restrictions, and 31,767 acres under no-surface-occupancy restrictions. No lands would be closed to geothermal leasing. A total of 31,767 acres would be closed to non-energy mineral leasing. A total of 471,962 acres would be available for location of mining claims, while 2,346 acres would be closed to mineral entry. A total of 447,631 acres would be open to mineral material sales, 27,267 acres would be closed.

Approximately 30,309 acres of public forest land would be open to commercial harvest under existing regulations, restrictions, and stipulations. Of this acreage, 2,283 acres are within the Eighteenmile Wilderness Study Area. Under this alternative, 26,269 acres of woodland would be available for non-sawtimber products.

The existing livestock use of 52,541 animal unit months (AUMs) would be maintained even though the active preference is 63,898 AUMs. Range improvements would be installed on a case-by-case basis. There will be grazing on 459,481 acres.

Wildlife habitat would be maintained. Existing game populations of about 7,470 deer, 1,974 elk, and 2,799 antelope would continue to utilize 5,399 AUMs of forage. No formal reservation of forage would be made. Project activity would be limited to that needed to maintain existing habitat. No watershed or riparian area improvements would be completed.

BLM would maintain 97.7 miles of fisheries habitat in their present condition. Surface-disturbing activities that would affect fisheries habitat would not be allowed.

Existing levels of recreation management would continue throughout the resource area. The special recreation management area designations for the Salmon River, Continental Divide National Scenic Trail, and Lewis and Clark National Historic Trail would be retained. A recreation area management plan would be completed for the Salmon River. Off-road vehicle use would continue to be limited during winter months on 16,230 acres of big game winter range and be restricted to existing roads and trails in the 24,922-acre Eighteenmile Wilderness Study Area.

For purposes of analysis, it is assumed that management of the Eighteenmile Wilderness Study Area would revert to the multiple use status it had prior to the wilderness study process and would be managed as nonwilderness.

Full suppression fire management guidelines would be followed on 459,566 acres, while prescribed burns would be conducted on 3,200 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 1,000 acres to decrease the likelihood of having a disastrous fire.

The 40-acre Chief Tendoy Cemetery would be protected by developing a cultural resource management plan.

Environmental Consequences Summary

There would be no increase in public lands made available for transfer. The acres of land available for minerals and forest management would remain the same. Ecological range condition would not improve, and recent overutilization of riparian areas by livestock would continue. No significant change in wildlife habitat would occur. Fisheries habitat condition would decline. Water quality and riparian habitat condition would decline. Recreation opportunities would remain the same. Wilderness values would be lost, and cultural resources would decline.

Alternative B

This alternative emphasizes livestock grazing management. It represents an optimistic outlook for livestock grazing, given present and anticipated future budget levels.

Management Action Summary

BLM would consider 3,419 acres for transfer from federal ownership through public sales or exchanges. A total of 6,192 acres having soils potential for agricultural development would be retained to help meet the objective of increasing livestock forage. BLM would attempt to acquire 4,960 acres primarily through exchange.

A total of 193,416 acres would be open for oil and gas leasing with standard stipulations, 214,804 acres with seasonal occupancy restrictions, and 52,577 acres under no-surface-occupancy restrictions.

A total of 15,596 acres would be closed to geothermal leasing for recreational development and wilderness. About 67,373 acres would be closed to non-energy mineral leasing. A total of 455,569 acres would be open for the location of mining claims, while 18,789 acres would be closed to mineral entry. About 408,240 acres would be open to mineral material sales; 66,658 acres would be closed.

Approximately 27,726 acres of public forest land would be open to commercial harvest. Of this acreage, 2,275 acres would receive restricted management to reduce impacts to critical elk winter range. Set-aside withdrawals included in this alternative would reduce the timber production base by 2,583 acres. About 20,755 acres of woodland would be available for non-sawtimber products; 5,514 acres would be closed.

Livestock management would provide 61,190 AUMs of livestock forage. BLM would strive to maintain or improve existing perennial forage plants, maintain soil stability, stabilize areas currently in downward trend, and increase availability of perennial forage plants. Range improvements would be implemented to help achieve these objectives.

Wildlife habitat management would be constrained to be compatible with the goals for range management. Game populations of about 4,800 deer, 900 elk, and 2,200 antelope would utilize 3,131 AUMs of forage. Project activity would be very minimal but more than under Alternative A. Two habitat management plans would be developed on 56 acres.

A total of 9.5 miles of riparian area would be fenced and four watershed activity plans would be written. New timber harvest roads would be closed when timber sales were completed.

BLM would maintain fisheries habitat in its present condition and trend. Surface-disturbing activities that would affect fisheries habitat would not be allowed.

Recreation management would be enhanced by defining special recreation management area (SRMA) boundaries, emphasizing visual resource management in the SRMAs, and protecting recreation sites with mineral entry withdrawals. The SRMA designations for the Salmon River, Continental Divide National Scenic Trail, and Lewis and Clark National Historic Trail would be retained. A recreation area management plan would be written for each SRMA.

Off-road vehicle use would continue to be limited during winter months on 16,230 acres of big game winter range. A year-round closure would be placed on 18,822 acres because of recreation opportunity spectrum and wilderness management restrictions.

A total of 14,796 acres would be recommended as suitable for wilderness and 10,126 acres as nonsuitable.

Full suppression fire management guidelines would be followed on 444,770 acres, while 14,796 acres would be managed under suppression restrictions to maintain wilderness quality. Prescribed burns would be conducted on 35,115 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural resource management plans would be written for the Chief Tendoy Cemetery, Lewis and Clark Trail, Salmon River Corridor, Indian Area A, and Indian Area B.

Environmental Consequences Summary

This alternative would transfer the least amount of land from federal ownership. There would be a slight increase in the amount of land closed to mineral development. Commercial forest land available for management would decrease to a moderate degree. Ecological range condition would decline significantly, there would be extensive range improvements, and livestock AUMs would show a major increase. Wildlife, riparian, and fisheries habitat would be significantly degraded. Substantial adverse changes in watershed condition are expected. Recreational opportunities would be increased and wilderness values would be maintained on 14,796 acres. Impacts to cultural resources would increase because of surface disturbance associated with livestock grazing and range improvement projects.

Alternative C

This alternative emphasizes wildlife and fisheries enhancement, wilderness and recreational values, cultural resource management, and watershed protection.

Management Action Summary

BLM would consider 4,077 acres for transfer from federal ownership through public sales or exchanges. An additional 1,190 acres would be considered for transfer under the Desert Land Act. BLM would attempt to acquire 5,600 acres primarily through exchange.

A total of 180,396 acres would be open for oil and gas leasing with standard stipulations, 174,319 acres with seasonal occupancy restrictions, and 91,526 acres with no-surface-occupancy restrictions. Approximately 29,352 acres would be closed to oil and gas leasing and 30,152 acres closed to geothermal leasing. About 120,878 acres would be closed to solid mineral leasing. A total of 438,805 acres would be open for the location of mining claims, while 35,688 acres would be closed to mineral entry. About 354,735 acres would be open to mineral materials sales; 120,163 acres would be closed.

Approximately 27,355 acres of public forest land would be open to commercial harvest. Of this acreage, 5,156 acres would receive restricted management to reduce the impacts to critical elk winter range. Set-aside withdrawals included in this alternative would reduce the timber production base by 2,954 acres. About 19,460 acres of woodland would be available for non-sawtimber products; 6,809 acres would be closed.

Livestock management would provide 29,921 AUMs of livestock forage. BLM would maintain existing perennial forage plants, maintain soil stability, and stabilize areas currently in downward trend. Range improvements would be limited to those necessary to correct areas of declining condition or to improve livestock management in the area. Allotment management plans would emphasize management of elk and bighorn sheep habitat, and of livestock grazing would be excluded on 18.3 miles of riparian area.

Wildlife habitat protection and enhancement would be one of the primary management goals for the resource area. Game populations of about 10,470 deer, 2,847 elk, 2,950 antelope, and 400 bighorn sheep would utilize 7,722 AUMs of forage. Extensive project development would provide water, habitat, and safety for wildlife. Six habitat management plans would be developed on 260,056 acres.

A total of 22 miles of riparian area would be fenced and four watershed activity plans would be written. New timber harvest roads would be closed when timber sales were completed.

BLM would maintain 92.7 miles of stream in present fisheries habitat condition. Utilization of forage would be limited to a maximum of 50 percent on Haynes and McDevitt creeks. All livestock grazing would be excluded on five miles of tributary stream.

Recreation would be recognized as the principal use of the lands in the three special recreation management areas (SRMAs). Additional mineral withdrawals, restrictions on some nonrecreational uses, and restrictive visual management practices would be implemented. A recreation area management plan would be written for each SRMA.

Off-road vehicle use would continue to be limited during winter months on 16,230 acres of big game winter range. A year-round closure to all vehicle use would be placed on 24,922 acres because of wilderness designation.

A total of 24,922 acres would be recommended as suitable for wilderness designation.

Full suppression fire management guidelines would be followed on 434,644 acres, while 24,922 acres would be managed under suppression restrictions to maintain wilderness quality. Prescribed burns would be conducted on 11,520 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural resource management plans would be written for the Chief Tendoy Cemetery, Lewis and Clark Trail, Salmon River Corridor, Indian Head Site, Indian Area A, Indian Area B, and Hawley Creek Canyon.

Environmental Consequences Summary

This alternative would slightly increase the amount of land being transferred from federal ownership, compared to Alternative A. More acreage would be closed to minerals management than under any other alternative. Commercial forest land available for management would decrease significantly because of restricted management. Ecological range condition would improve significantly and livestock AUMs would show a major decrease. Wildlife habitat condition and available wildlife AUMs would increase. Fisheries habitat would show a significant improvement. Major improvements in riparian habitat, watershed condition, and water quality can be expected. A significant increase in recreational opportunities would take place. Wilderness values would be protected on 24,922 acres. Impacts to cultural resources would decrease significantly.

Alternative D

This alternative emphasizes mineral development on the public lands. The objective is to manage the federal mineral estate to allow optimum exploration and development, while minimizing unnecessary impacts to other resources.

The Eighteenmile Wilderness Study Area would be for nonwilderness uses.

Management Action Summary

BLM would consider 3,629 acres for transfer from federal ownership through public sales or exchange. An additional 2,550 acres would be considered for transfer under the Desert Land Act. BLM would attempt to acquire 2,400 acres primarily through exchange.

No lands would be closed to fluid mineral (oil and gas) or geothermal leasing. About 6,405 acres would be closed to solid mineral leasing. A total of 472,794 acres would be open for the location of mining claims, while 1,564 acres would be closed to mineral entry. About 472,923 acres would be open to mineral materials sales; 1,975 acres would be closed.

Approximately 30,294 acres of public forest land would be open to commercial harvest. Of this acreage, 1,646 acres would be subject to restricted management to reduce the impacts to critical elk winter range. The only set-aside would be 15 acres for the Williams Lake Recreation Site. About 26,269 acres of woodland would be available for non-sawtimber products.

Livestock management would provide 53,803 AUMs of livestock forage. BLM would maintain or improve existing perennial forage plants, maintain soil stability, and stabilize areas currently in a downward trend. Range improvements would be implemented to help achieve these objectives.

The general wildlife objective would be to attempt to hold habitat losses to a minimum. Game populations of 5,899 deer, 862 elk, and 1,866 antelope would utilize 3,431 AUMs of forage. Project development would occur, providing water, habitat, and safety for wildlife. Two habitat management plans would be developed on 102,000 acres.

A total of 11.5 miles of riparian area would be fenced and four watershed activity plans would be written. New timber harvest roads would be closed after completion of timber sales.

BLM would maintain 94.7 miles of fisheries habitat in their present condition. Surface-disturbing activities that would affect fisheries habitat would not be allowed.

Recreation management would be reduced to a level which provided for recreational use of the public lands but did not improve or maximize opportunities. No withdrawals or vehicle restrictions would be implemented. The special recreation management area (SRMA) designations would be retained, and each would have a recreation area management plan prepared. The size of the SRMAs would be minimal.

The 24,922 acres in the Eighteenmile Wilderness Study Area would be recommended as nonwilderness designation.

Full suppression fire management guidelines would be followed on 459,566 acres. Prescribed burns would be conducted on 18,450 acres, and heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural resource management plans would be written for the Chief Tendoy Cemetery, Indian Area A, and Indian Area B.

Environmental Consequences Summary

This alternative would slightly increase the amount of land being transferred from federal ownership, compared to Alternative A Less land would be closed to minerals management than under any other alternative. Commercial forest land available for management would decrease slightly.

Ecological range condition would improve moderately and livestock AUMs would show a minor increase. Wildlife habitat would show a significant adverse impact, and forage available to wildlife would be less. This alternative would have the most severe impact on wildlife of any of the alternatives. Fisheries habitat would decline. A decline in overall soil, water quality, and watershed condition is expected. Quality recreational opportunities would decrease. Wilderness values would not be protected. Impacts to cultural resources would increase significantly.

Alternative E

This alternative emphasizes intensive management on 30,309 acres of commercial forest land for sustained yield production.

Management Action Summary

BLM would consider 5,087 acres for transfer from federal ownership through public sales or exchanges. An additional 5,310 acres would be considered for transfer under the Desert Land Act. BLM would attempt to acquire 1,640 acres primarily through exchange.

A total of 175,121 acres and 173,626 acres would be open for oil and gas leasing and geothermal leasing, respectively, with standard stipulations. Also, 264,003 acres with seasonal occupancy restrictions, and 36,469 acres with no-surface-occupancy restrictions would be available for oil and gas and geothermal leasing. No lands would be closed to oil and gas leasing. Geothermal leasing would not be allowed on 800 acres. Approximately 36,469 acres would be closed to solid mineral leasing. A total of 469,388 acres would be open for location of mining claims, while 4,970 acres would be closed to mineral entry. About 439,052 acres would be open to mineral material sales; 35,846 acres would be closed.

Approximately 30,309 acres of public forest land would be open to commercial harvest. Of this acreage, 2,283 acres would be within the Eighteenmile Wilderness Study Area. About 26,269 acres of woodland would be available for non-sawtimber products.

Livestock management would provide 49,589 AUMs of livestock forage. BLM would improve existing perennial forage plants, maintain soil stability, and stabilize areas currently in a downward trend. Range improvements would be implemented to help achieve these objectives.

Wildlife habitat management would be constrained to be compatible with forest management. Game populations of about 8,437 deer, 1,181 elk, 2,600 antelope, and 136 bighorn sheep would utilize 4,920 AUMs of forage. Project development would provide water, habitat, and safety for wildlife. Two habitat management plans would be developed on 148,000 acres.

A total of 12.5 miles of riparian area would be fenced and four watershed activity plans would be written. New timber harvest roads would be closed after completion of timber sales.

Fisheries actions would be as described for Alternative D.

Recreation management would be enhanced by defining special recreation management area (SRMA) boundaries, emphasizing visual resource management in two of the SRMAs, and protecting recreation sites with mineral entry withdrawals. The three SRMAs would remain and a recreation area management plan would be written for each. Off-road vehicle use would continue to be limited during winter months on 16,230 acres of big game winter range.

The 24,992 acres in the Eighteenmile Wilderness Study Area would be recommended as nonsuitable for wilderness designation.

Full suppression fire management guidelines would be followed on 459,566 acres. Prescribed burns would be conducted on 22,075 acres, and heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural resource management plans would be written for the Chief Tendoy Cemetery, Lewis and Clark Trail, Salmon River Corridor, Indian Area A, Indian Area B, and Indian Head Site.

Environmental Consequences Summary

Most land would be transferred from federal ownership than under any other alternative. There would be a slight increase, compared to Alternative A, in the amount of land closed to minerals management. Commercial forest lands available for management would be the same as in Alternative A. Ecological range condition would improve moderately and livestock AUMs would show a minor long-term increase. Wildlife habitat would show a moderate improvement in condition, and forage available to wildlife would be increased. Fisheries and riparian habitat would decline. Decline in overall soil, water quality, and watershed condition is expected. Recreational opportunities would increase. Wilderness values would not be protected. Impacts to cultural resources would increase.

Alternative F

This is BLM's Preferred Alternative. It gives no special emphasis to any one resource but instead emphasizes balanced, multiple use management and is based upon a realistic expectation of funding.

Management Action Summary

BLM would consider 4,495 acres for transfer from federal ownership through public sales or exchanges. An additional 1,340 acres would be considered for transfer under the Desert Land Act. BLM would attempt to acquire 5,600 acres primarily through exchange

A total of 161,909 acres would be open for oil and gas leasing with standard stipulations, 221,519 acres with seasonal occupancy restrictions, and 77,369 acres with no-surface-occupancy restrictions. Approximately 14,796 acres would be closed to oil and gas leasing and 15,596 acres closed to geothermal leasing. About 92,165 acres would be closed to solid mineral leasing. A total of 455,434 acres would be open for location of mining claims while 18,821 acres would be closed to mineral entry. Mineral sales could not occur on 92,010 acres, but the remaining 382,888 acres would be open to material sales.

Approximately 28,865 acres of public forest land would be open to commercial harvest. Of this acreage, 1,179 acres would receive restricted management to reduce impacts to critical elk winter range. Set-asides included in this alternative would reduce the timber production base by 1,444 acres. About 23,138 acres of woodland would be available for non-sawtimber products, while 3,131 acres would be closed.

Livestock management would provide 43,602 AUMs of livestock forage. BLM would maintain or improve existing perennial forage plants, maintain or improve soil stability, and stabilize or improve areas currently in a downward trend. Range improvements would be implemented to help achieve these objectives.

Game populations of 10,113 deer, 2,194 elk, 2,950 antelope, and 200 bighorn sheep would utilize 6,749 AUMs of forage. Project development would occur, providing water, habitat, and safety for wildlife. Six habitat management plans would be developed on 260,056 acres.

A total of 15.5 miles of riparian area would be fenced and four watershed activity plans would be written. New timber harvest roads would be closed when timber sales were completed.

BLM would maintain 94.7 miles of fisheries habitat in present condition and improve 5.0 miles. Surface-disturbing activities adversely affecting Class III streams would be avoided, if practical.

Recreation would be recognized as the principal use of the lands in the three special recreation management areas (SRMAs). Additional mineral withdrawals, restrictions on some nonrecreational uses, and restrictive visual management practices would be implemented. A recreation area management plan would be written for each SRMA.

Off-road vehicle use would continue to be limited during winter months on 16,230 acres of big game range. A year-round closure to all vehicle use would be placed on 14,796 acres because of wilderness designation.

A total of 14,796 acres would be recommended as suitable for wilderness designation.

Full suppression fire management guidelines would be followed on 444,770 acres. Prescribed burns would be conducted on 30,078 acres, and heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural resource management plans would be written for the Chief Tendoy Cemetery, Lewis and Clark Trail, Salmon River Corridor, Indian Area A, and Indian Area B. (A recreation area management plan would be written for the Lewis and Clark Trail that would provide for protection of cultural and historic values.)

Environmental Consequences Summary

There would be a modest increase in the amount of land being transfered from federal ownership compared to Alternative A. The increase in the amount of land closed to minerals management would be slightly significant. Commercial forest land available for management would decrease slightly. Ecological range condition would improve moderately. Livestock AUMs would show a minor increase. Wildlife habitat condition and available wildlife AUMs would increase but not to the extent they would under Alternative C. Fisheries and riparian habitat would show a slight increase. Slight decline in watershed condition would occur because of timber harvesting. A major increase in recreational opportunities would take place. Wilderness values would be protected on 14,796 acres. Impacts to cultural resources would decrease slightly.

Alternative G

This alternative is basically the same as the Preferred Alternative (Alternative F). It was developed to manage those resources that would be affected if Congress did not designate as wilderness the Eighteenmile Wilderness Study Area recommended in Alternative F.

Management Action Summary

This alternative would involve the same management actions as Alternative F, except for the following:

A total of 163,723 acres would be open for oil and gas leasing with standard stipulations, 221,905 acres with seasonal occupancy restrictions, and 89,965 acres with no-surface-occupancy restrictions. There would be no lands closed to oil and gas leasing, but 800 acres would be closed to geothermal leasing. About 89,965 acres would be closed to solid mineral leasing. A total of 470,233 acres would be open for location of mining claims, while 4,125 acres would be closed to mineral entry. Material sales could occur on 885,068 acres, while 89,830 acres would be closed.

Approximately 28,962 acres of public forest land would be open to commercial harvest. Of this acreage, 1,179 acres would receive restricted management to reduce impacts to critical elk winter range. Set-asides included in this alternative would reduce the timber production base by 1,347 acres. About 23,336 acres of woodland would be available for non-sawtimber products, while 2,933 acres would be closed.

A total of 2,182 acres in the Eighteenmile Wilderness Study Area would be open to off-road vehicle use. The remaining acreage would be closed to retain existing recreation opportunities.

A total of 14,796 acres in the Eighteenmile Wilderness Study Area would receive full suppression fire management. A prescribed burn would be conducted on 500 acres in the study area.

Environmental Consequences Summary

Impacts would be the same as described for Alternative F, with three exceptions. There would be less land closed to minerals management than in Alternative F. Commercial forest land available for management would increase slightly when compared to Alternative F. Wilderness values would receive less protection.

The Alternative Summary Table (Table S-1) illustrates the management actions proposed under the various alternatives.

TABLE S-1
ALTERNATIVE SUMMARY TABLE

LEMHI RMP

Management Objective/Action	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
LANDS							
A. Transfer areas							
1. Transfer (sale, exchange)	4,818	3,419	4,077	3,629	5,087	4,495	4,495
2. Agriculture entry	1,270	0	1,190	2,550	5,310	1,340	1,340
2a. Soils potential							
TOTAL TRANSFER	6,088	3,419	5,267	6,179	10,397	5,835	5,835
B. Retain in public ownership	453,478	456,147	454,299	453,387	449,169	453,731	453,731
C. Acquire	0	4,960	5,600	2,400	1,640	5,600	5,600
D. Acreage available for right-of-way development							
1. All right-of-way development	455,161	440,365	430,239	455,161	459,566	440,365	440,365
2. Restricted right-of-way development	4,405	4,405	4,405	4,405	0	4,405	4,405
3. Closed to right-of-way development	0	14,796	24,922	0	0	14,796	14,796
MINERALS							
A. Leasable minerals							
Aa. Oil and gas							
1. Acres open to leasing with standard stipulations	204,511	193,416	180,396	469,188	175,121	161,909	163,723
2. Acres open to leasing with seasonal occupancy restrictions	239,315	214,804	174,319	0	264,003	221,519	221,905
3. Acres open to leasing with no surface occupancy stipulations	31,767	52,577	91,526	6,405	36,469	77,369	89,965
4. Acres closed to leasing	0	14,796	29,352	0	0	14,796	0
Ab. Geothermal							
1. Acres open to leasing with standard stipulations	203,816	191,921	179,701	468,493	173,626	161,214	163,028
2. Acres open to leasing with seasonal occupancy restrictions	239,315	214,804	174,319	0	264,003	221,519	221,905
3. Acres open to leasing with no surface occupancy stipulations	31,767	52,577	90,726	6,405	36,469	76,569	89,165
4. Acres closed to leasing	0	15,596	30,152	0	800	15,596	800
Ac. Non-energy mineral leasing							
1. Acres open to leasing with standard stipulations	203,816	191,891	179,701	468,493	174,426	160,848	163,028
2. Acres open to leasing with seasonal occupancy restrictions	239,315	215,634	174,319	0	264,003	221,885	221,905
3. Acres closed to leasing	31,767	67,373	120,878	6,405	36,469	92,165	89,965
B. Locatable minerals							
1. Acres open to location	471,962	455,569	438,805	472,794	469,388	455,434	470,233
2. Acres closed to location	2,346	18,789	35,688	1,564	4,970	18,921	4,125
3. Open to location but subject to superior rights (Material site, Free Use Permits, etc.)	590	540	405	540	540	540	540
C. Salable mineral materials							
1. Acres open for mineral material disposals	447,631	408,240	354,735	472,923	439,052	382,888	385,068
2. Acres closed to mineral material disposals	27,267	66,658	120,163	1,975	35,846	92,010	89,830
FOREST MANAGEMENT							
A. Commercial forest land (CFL)	36,355	36,355	36,355	36,355	36,355	35,355	36,355
1. TPCC set-aside	6,046	6,046	6,046	6,046	6,046	6,046	6,046
2. Set-aside (protection of developed recreation sites, national scenic trails, etc.)	0	2,583	2,954	15	0	1,444	1,347
3. Total available CFL	30,309	27,726	27,355	30,294	30,309	28,865	28,962
4. Multiple use restrictions on forest management	0	2,275	6,066	2,302	0	1,760	1,760
5. Available CFL without restrictions	30,309	25,451	21,289	27,992	30,309	27,105	27,202
B. Available woodland	26,269	20,755	19,460	26,269	26,269	23,138	23,336
C. Woodland closures							
1. Recreation values	0	2,237	622	0	0	622	2,933
2. Wilderness	0	3,277	6,187	0	0	2,509	0
D. Allowable cut (million board feet)	1.07	1.07	1.07	1.07	1.07	1.07	1.07
RANGE MANAGEMENT							
A. Areas of use by livestock							
1. Available acreage	459,566	459,566	454,674	459,566	459,566	459,566	459,566
2. Closed	0	0	4,892	0	0	0	0
3. Potential land transfer	5,422	2,766	4,683	5,867	9,983	5,182	5,182
B. Stocking levels (active preference)	63,898	63,898	63,898	63,898	63,898	63,898	63,898
1. Initial (actual use)	52,541	61,910	29,921	53,803	49,589	43,602	43,602
2. % Change from existing*	(-18%) 0%	(-3%) +16%	(-53%) -44%	(-16%) 2%	(-22%) -7%	(-32%) -19%	(-32%) -19%
3. Future (+20 years)	53,633	70,836	37,064	59,129	55,465	52,632	52,632
4. % Change from existing	(-16%) +2%	(+11%) +32%	(-42%) -31%	(-7%) +10%	(-13%) +4%	(-18%) -2%	(-18%) -2%
C. Vegetation communities							
1. Ac. poor improved	1,064	0	1,064	1,064	1,064	1,064	1,064
2. Ac. fair improved	1,914	0	55,834	25,576	16,912	21,876	21,876
D. Range improvements							
1. Brush control	1,550	24,606	7,490	14,000	22,700	22,700	22,700
2. Seeding	275	13,438	5,400	17,500	4,400	4,400	4,400
3. Springs	10	50	31	30	32	32	32
4. Pipelines	8	81	58	41	50	50	50
5. Reservoirs	1	9	11	7	4	4	4
6. Fences	9	101	42	56	63	63	63
7. Total cost	109,791	1,465,290	617,826	683,900	787,947	787,947	787,941
E. Allotment categorization							
1. % Maintain (M)	16	16	16	16	16	16	16
2. % Improve (I)	55	55	55	55	55	55	55
3. % Custodial (C)	17	17	17	17	17	17	17

*(%) is percent change from active preference.
% is change from actual use.

TABLE S-1 (Concluded)
ALTERNATIVE SUMMARY TABLE

Management Objective/Action	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
WILDLIFE							
A. AUM's (cattle equiv.) of use							
1. Elk	2,182	980	3,124	946	1,296	2,407	2,407
2. Mule deer	2,767	1,800	3,878	2,185	3,125	3,746	3,746
3. Antelope	450	351	474	300	419	474	474
4. Bighorn sheep	0	0	246	0	80	122	122
B. Wildlife habitat improvements							
1. Prescribed burns	0	5,500	7,360	0	3,705	7,360	7,360
2. Pipelines (to augment guzzlers)	0	1	6	1	2	6	6
3. Fences							
3a. Construction (miles)	0	2	5	1	2	6	6
3b. Modification (miles)	30	75	154	40	101	154	154
4. Guzzlers	4	5	18	5	9	18	18
C. Management actions							
1. Minerals no surface occupancy to protect important habitats	0	69,057	85,800	0	29,540	69,057	69,057
2. Restricted timber management/harvest	0	2,305	5,156	1,646	591	1,179	1,179
3. Restricted livestock	0	0	48,000	15,900	8,800	8,800	8,800
4. Seasonal use restrictions (minerals related)	240,000	223,400	196,900	0	269,460	223,400	223,400
5. State land acquisition	0	4,360	4,960	1,920	1,160	4,960	4,960
6. Private land acquisition	0	600	640	480	480	640	640
7. Off-road vehicle restriction	16,200	0	16,200	0	0	16,200	16,200
WATERSHED AND FISHERIES							
A. Miles of stream managed primarily for riparian habitat improvement, water quality protection	0	9.5	22	11.5	11.5	15.5	15.5
B. Acres of riparian area in unsatisfactory condition that would be managed for improvement	0	138	5,100	167	167	500	500
C. Acres of unsatisfactory condition watershed that would be improved to a satisfactory condition	0	0	10,430	0	0	1,494	1,494
D. Miles of stream habitat improvement	0.0	3.0	5.0	3.0	3.0	3.0	3.0
E. Miles of stream maintained in present condition	97.7	94.7	92.7	94.7	94.7	94.7	94.7
RECREATION MANAGEMENT							
A. Off-road vehicle designations							
1. Open	426,696	424,514	418,414	459,566	443,336	428,540	430,722
2. Limited	16,230	16,230	16,230	0	16,230	16,230	16,230
3. Closed	16,640	18,822	24,922	0	0	14,796	12,614
B. Recreation opportunity spectrum classes							
1. Primitive	3,840	3,840	3,840	0	0	3,840	3,840
2. Semi-primitive non-motorized	12,800	14,982	21,082	0	0	10,956	8,774
3. Semi-primitive motorized	17,280	15,098	8,998	0	0	19,124	21,306
4. Roaded natural	416,371	416,371	416,371	450,291	450,291	416,371	416,371
5. Rural	9,275	9,275	9,275	9,275	9,275	9,275	9,275
C. Special designations							
1. salmon river SRMA*	4,405	4,405	4,405	4,405	4,405	4,405	4,405
2. Continental Divide National Scenic Trail SRMA*	4,600	4,600	8,200	4,600	4,600	4,600	4,600
3. Lewis and Clark National Historic Trail SRMA*	1,800	9,080	9,080	1,800	2,810	9,080	9,080
D. Visual resource management classes							
1. Class I	29,327	14,796	38,407	0	4,405	14,796	0
2. Class II	15,720	32,805	22,920	0	18,530	29,280	30,280
3. Class III	183,200	180,880	180,680	203,325	182,515	184,205	184,205
4. Class IV	231,319	231,085	217,559	256,241	254,116	231,285	245,081
E. Developed recreation sites	7	9	9	7	9	9	9
WILDERNESS							
A. WSA recommendation							
1. Suitable	0	14,796	24,922	0	0	14,796	0
2. Nonsuitable	24,922	10,126	0	24,922	24,922	10,126	24,922
FIRE MANAGEMENT							
A. Suppression restrictions	0	14,796	24,922	0	0	14,796	0
B. Prescribed fire areas	3,200	35,115	11,520	18,450	22,075	30,078	30,578
C. Full suppression	459,566	444,770	434,644	459,566	459,566	444,770	456,566
D. Limited suppression	0	0	0	0	0	0	0
E. Hazard reduction	1,000	10,000	10,000	10,000	10,000	10,000	10,000
CULTURAL							
A. Withdrawals							
1. Lewis and Clark Trail	0	1,820	2,810	0	2,810	1,820	1,820
2. Indian Head	0	0	40	0	40	0	0
3. Hawley Creek	0	0	440	0	0	0	0
4. Indian Area A	0	120	120	120	120	120	120
5. Indian Area B	0	120	1,040	40	120	120	120
6. Salmon River Corridor	0	0	4,405	0	0	0	0
7. Chief Tendoy Cemetery Add-on	0	40	120	0	80	80	80
B. Already withdrawn							
1. Chief Tendoy Cemetery	40	40	40	40	40	40	40
C. No surface occupancy							
1. Lewis and Clark Trail	0	0	2,810	0	2,810	1,820	1,820
2. Chief Tendoy Cemetery	40	160	320	40	160	160	160
3. Indian Head	0	40	40	0	40	40	40
4. Hawley Creek	0	440	440	0	440	440	440
5. Indian Area A	0	120	120	120	120	120	120
6. Indian Area B	0	760	1,040	40	760	880	880
7. Gilmore Pittsburg Railroad	0	300	300	0	300	300	300
8. Salmon River Corridor	0	4,405	4,405	0	4,405	4,405	4,405

*(SRMA) = Special Recreation Management Area

CHAPTER 1

PURPOSE AND NEED

INTRODUCTION

The Lemhi Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Salmon District Office, with a comprehensive framework for managing 459,566 acres of BLM-administered public land over the next 10 years. Given conflicting demands for livestock forage, mineral development, recreation, wildlife habitat, and other resources, prudent stewardship of the public lands can no longer be accomplished without comprehensive land use planning.

This section of the document is a draft environmental impact statement (EIS) that analyzes a BLM-preferred plan and six other alternative plans. Each of the RMP alternatives address the nine planning issues identified through public participation. The nine issues deal with lands (transfers and exchanges), mineral development, forest and woodland management, range management, wildlife habitat, watershed management, recreation, off-road vehicle use, and wilderness. The preferred RMP alternative reflects BLM's effort to resolve resource conflicts and assure that the public lands are managed in accordance with the principles of multiple use and sustained yield.

The Lemhi RMP is being prepared under the authority of and in accordance with Sections 201 and 202 of the Federal Land Policy and Management Act of 1976 (Public Law 94-579, FLPMA). In addition, pursuant to Section 603 of FLPMA, this document analyzes preliminary wilderness suitability recommendations for the Eighteenmile Wilderness Study Area (WSA) located within the planning area boundary. This document will make only a preliminary recommendation as to the WSA's suitability or nonsuitability for inclusion into the National Wilderness Preservation System. This recommendation will be reported through the Director of the BLM, the Secretary of the Interior, and the President to Congress. The final decision on suitability or nonsuitability of the WSA will be made by Congress.

This document also serves as the instrument to satisfy the intent of the 1975 U. S. District Court approved agreement (Case 1983-73) between BLM and the Natural Resources Defense Council, et al; in which BLM agreed to consider the impacts of various intensities of livestock grazing in its decision-making process. Livestock grazing was identified as one of the planning issues. It is addressed in the land use plan and considered in this EIS.

The draft EIS is intended to aid Bureau officials in the final selection of a resource management plan. The EIS further satisfies the intent of the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act of 1969 (NEPA), 40 CFR Part 1500.

The intent of the CEQ regulations is to "ensure environmental information is available to public officials and citizens before decisions are made and before actions are taken." When finalized, the EIS will provide an environmental analysis of the approved RMP that may be referenced for future activity planning and project implementation associated with the RMP.

TOPICS FOR ANALYSIS IN THIS EIS

In Part I of this RMP, it was noted that planning issues were developed to help focus the planning effort to ensure that only important issues were dealt with. By the same token, environmental impact analysis topics were developed to focus the impact analysis effort and weed out unimportant topics.

The environmental impact analysis topics came from two primary sources:

1. Public Scoping Activities: Since the analysis topics deal with impacts arising from the seven RMP alternatives and these alternatives, in turn are responses to the planning issues; the analysis topics are an indirect result of scoping meetings held in early 1983.

2. Internal BLM Scoping: BLM resource specialists studied the management actions proposed under the seven RMP alternatives, determined the resource that would be affected, and then formulated the analysis topics.

The environmental impact analysis topics are given below. Following each topic is a brief discussion of the rationale for its selection.

Environmental Topics

1. Impacts to Energy and Minerals Availability

The Lemhi RMP area has a variety of energy and mineral resources. The availability of lands for energy and mineral exploration and development could be affected by seasonal restrictions, no-surface-occupancy, withdrawals, and other management restrictions. Restrictions are designed to protect wildlife habitat, recreation values, wilderness values, and cultural resources. These restrictions vary from alternative to alternative and would thus result in different levels of impact.

2. Impacts to Timber Yield and Availability

Although the present sustained yield allowable cut would be met in all alternatives, there could be an adverse impact on the timber yield and on the availability of commercial forest lands and woodlands because of set-asides, management restrictions and closures.

Efforts to protect recreation and wilderness values, and to protect or enhance elk winter range could result in some suitable commercial forest lands and woodlands being unavailable for harvest. The loss of timber yield and acreage not available for timber harvest or woodland product sales vary between alternatives and, therefore, needs to be analyzed separately for each alternative.

3. Impacts to Livestock Grazing

The number of animal unit months (AUMs) authorized for livestock grazing could be affected by proposed stocking levels, range management practices, and land transfers. The various alternatives propose either increases or decreases to the amount of livestock grazing. Management practices involving vegetation manipulation and range improvement projects could increase AUMs available for livestock. Land transfers could take land out of grazing use.

4. Impacts to Range Vegetation

The value of the range resource, as measured by ecological condition, could be either adversely or beneficially affected by the various alternatives. Impacts arising from changes in proposed livestock grazing levels and from livestock management actions (vegetation manipulation and range improvement projects) must be analyzed and compared.

5. Impacts to Crucial Wildlife Habitats

Various management actions in the RMP alternatives could impact crucial wildlife habitats. Actions relating to livestock grazing levels, vegetation manipulation, range improvement projects, land transfers, energy and mineral development, forest management, recreation, and wildlife management would have either adverse or beneficial impacts on crucial wildlife habitats.

6. Impacts to Fisheries Habitat

In the Lemhi RMP area, excellent fishing opportunities exist for both resident and anadromous species, but most opportunities exist on Forest Service or private land. However, fisheries habitat on public land, particularly habitat involving tributaries to the Salmon River, is important. Management actions dealing with livestock grazing, watershed, and fisheries habitat could have either beneficial or adverse impacts to fisheries habitat on both public and private land.

7. Impacts to Water Quality, Watershed, and Soils

Various management actions in the RMP alternatives could impact water quality, watershed, and soils. These actions--livestock grazing level changes, vegetation manipulations, range improvement projects, wildlife habitat improvements, and watershed management--could have either adverse or beneficial impacts on water quality, watershed, and soils. These three resources could be analyzed as separate topics but are so interrelated, they are best analyzed together.

8. Impacts to Riparian Habitat

Riparian areas make up a small but significant vegetation community that is important to wildlife, fisheries, water quality, watershed, and livestock grazing. Livestock grazing is currently having a severe adverse impact on many riparian areas. Management actions proposed in the RMP alternatives dealing with livestock grazing levels, watershed management, fisheries management, and range improvements could have either beneficial or adverse impacts on riparian habitat.

9. Impacts to Recreation and Visual Quality

Recreation uses and visual quality could be affected by actions proposed under the various alternatives. Timber harvesting and mineral development could adversely affect the availability of primitive and semi-primitive recreation opportunities, as well as visual quality. Recreation management actions, particularly those involving special recreation management areas and off-road vehicle designations, could have either beneficial or adverse impacts.

10. Impacts to Wilderness Values

The wilderness values of naturalness, solitude, primitive recreation, and various special values could benefit from wilderness designation. The same values may be adversely affected by uses and actions that could occur, should the Eighteenmile Wilderness Study Area not be designated wilderness.

11. Impacts to Cultural Resources

The Lemhi RMP area has unique features such as the historic Lemhi Indian Reservation and the Chief Tendoy Cemetery, plus the socio-cultural value the Lemhi-Shoshone place on the area. Management actions under the various alternatives arising from either BLM programs on public-initiated requests could affect cultural resources.

12. Impacts to Economic Factors

Economic factors are an important part of the human environment in the RMP area. Actions associated with transfers, energy and minerals development, forest management, livestock grazing, and recreation management could have economic impacts.

TOPICS NOT ANALYZED IN DETAIL

The following environmental topics were identified but were not selected for detailed analysis in this EIS. The reasons for setting each topic aside are discussed below:

1. Impacts to Endangered Species

BLM is aware of the presence of three listed species: the gray wolf, peregrine falcon, and bald eagle.

The Idaho Department of Fish and Game and the U. S. Fish and Wildlife Service will be consulted prior to implementing projects that may affect habitat for threatened and endangered species. If a "may affect" situation is determined through the BLM environmental assessment process, consultation with the Fish and Wildlife Service will be initiated as required by Section 7 of the Endangered Species Act of 1973, as amended.

This topic was dropped from analysis because any situation which may affect endangered species will be taken care of through the formal consultation process.

2. Impacts of Utility/Rights-of-Way on Other Resources

Utility and transportation development may be permitted, based on consideration of the following criteria:

- type of and need for the proposed facility

- conflicts with other resource values and uses, including potential values and uses

- availability of alternatives mitigation measures

This topic was dropped from analysis because any situation involving utilities and rights-of-way will be handled by standard BLM policy. Also, not much BLM land is involved; there are no impacts and no critical resource values.

3. Impacts to Paleontological Resources

Paleontological resources will be managed to protect and maintain or enhance sites or areas for their scientific, educational values, and recreational values.

The potential impacts to the paleontologic resources of the Lemhi Resource Area are unknown since an inventory has not yet been completed. Once an inventory was completed and site clearances became standard practice, the resource would be adequately protected.

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This topic was dropped from analysis because the paleontological resources of the Lemhi Resource Area are unknown. When these resources are identified, they will be protected by standard operating procedures.

4. Impacts of Noxious Weeds on Other Resources

Control of noxious weeds is an important management concern. Especially important is leafy spurge (Euphorbia esula), which has infested the area from Kirtley Creek to Badger Springs. This topic was dropped from analysis because (1) BLM policy is to control noxious weeds and (2) BLM has prepared the "Idaho Noxious Weed Control Environmental Assessment", and the "Northwest Area Noxious Weed Control Program EIS", both of which adequately addresses environmental impacts

CHAPTER 2

ALTERNATIVES INCLUDING THE PROPOSED ACTION

Both the National Environmental Policy Act (NEPA) regulations and the BLM resource management planning regulations require the formulation of a range of alternatives. Each alternative must be a complete and reasonable plan to guide future management of public land and resources. One alternative must represent no action, which is simply a continuation of present levels or systems of resource use. The other alternatives must provide a range of choices from those favoring resource production to those favoring resource protection.

The Preferred Alternative (Alternative F) is the same as the Proposed Management Prescription described in Part I. The one exception is grazing, for which the proposed action is Alternative A.

The alternatives were formulated specifically to respond to the planning issues identified at the beginning of the planning process. (See Part I, Resource Management Plan, for a listing of the planning issues.) No single alternative could have satisfied all of the concerns expressed in the issues. However, taken together, the seven alternatives address each issue in a variety of ways.

Some lands, resources, and programs were not raised as issues either by BLM, other government agencies, or the public. These are not addressed in this RMP and will be managed in the future essentially as they are at present. Any future changes in management will be based on a case-by-case analysis and will be subject to all applicable laws, regulations, and policies.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Two alternatives were considered by the RMP Core Team but were not developed or analyzed in detail because they did not meet the criteria for selection. These alternatives and the reasons for their elimination are presented below.

No Livestock Grazing

This alternative would have excluded all livestock grazing on public lands in the planning area. It was eliminated for the following reasons:

1. Resource conditions, including range, vegetation, watershed, and wildlife habitat, do not warrant prohibition of livestock grazing resource areawide. However, elimination of livestock grazing was considered on selected allotments and in riparian areas under other alternatives.

2. Elimination of grazing would be in direct conflict with existing laws and regulations and would not provide for multiple use of public lands.

3. The cost of removing range improvement projects not benefitting other programs would be prohibitive.

4. The enforcement of no livestock grazing on the fragmented pattern of public lands in the resource area would be unmanageable and very expensive.

5. Public comments received during the issue identification and criteria development steps indicate a general acceptance of livestock grazing on public land, provided that such grazing is properly managed.

6. It is estimated that permittees using BLM lands generate $1.9 million in annual income for Lemhi County and 239 jobs. Given this economic significance and the general social acceptance of livestock grazing, people in Lemhi County and the state of Idaho would not support a no grazing alternative.

This alternative was considered to be unreasonable and unrealistic.

No Timber Harvest

This alternative would have excluded all timber harvest on public lands in the planning area. It was eliminated because it was not consistent with existing laws and regulations, did not include adequate provisions for multiple use of public lands, and would have had adverse social and economic impacts. A total of $336,000 and 19 jobs would be lost to the local economy. The timber industry in Lemhi County is already depressed because of a shortage of timber. This alternative would have worsened the situation and thus been unacceptable to the people of Lemhi County. However, elimination of timber harvest was considered on selected areas to protect wilderness, wildlife, and recreation values under other alternatives.

ALTERNATIVES CONSIDERED IN DETAIL

ALTERNATIVE A

Goal: The "No Action" alternative would continue present management.

Present levels of management would be continued, with measures being taken to prevent or correct deteriorating conditions. Any changes in management would be brought about through monitoring and the environmental assessment process. Land transfer actions would apply only to those lands where no conflicts occurred and where transfer would be of benefit to the federal government and in the best public interest.

Management actions would be guided by the Salmon and Lemhi Management Framework Plans. No management framework plan exists for the Gilmore Unit which runs roughly from the town of Leadore south to the Salmon District boundary.

The Eighteenmile Wilderness Study Area would not be recommended for wilderness designation. As defined by BLM policy, Alternative A is the proposed action for livestock grazing.

Map 6 illustrates the lands selected for transfer (6,088 acres) and the Multiple Use lands (453,478 acres) under Alternative A.

Lands

Under this alternative, BLM would consider for transfer 4,818 acres from federal ownership through public sales or exchanges. This acreage would consist of small isolated parcels of public land and parcels with unauthorized private uses (primarily agricultural uses). Public access to these is limited in most cases and the parcels provide little benefit to the general public. Detailed examinations would be conducted on these parcels prior to any transfer action.

BLM would also consider for transfer 910 acres under the Desert Land Act, as amended. These parcels contain Class III or better soils and may be suitable for agricultural development. Detailed examinations would also be conducted on these parcels prior to any transfer actions.

A total of 360 acres would be transferred through sale, exchange, or Desert Land Entry. These are isolated parcels that contain Class III or better soils. They were identified for transfer in the previous land use plans and were not closed to agricultural entry by the Classification and Multiple Use Act.

A total of 453,478 acres of public land would be retained. Land acquisitions would occur through exchanges with private landowners and the state of Idaho. These would be done on a case-by-case basis. The classification for retention of 422,578 acres under the Classification and Multiple Use Act would remain unchanged.

Right-of-way development could occur with no restrictions on 455,161 acres. Restrictions would be imposed on 4,405 acres. No lands would be closed to right-of-way development.

Energy and Minerals

Under this alternative, the objective would be to manage 475,593 acres of federal mineral estate in a manner that would allow exploration and development while minimizing unnecessary impacts to other resources. To accomplish this, a total of 204,511 acres would be open for oil and gas leasing with the standard stipulations; another 239,315 acres would be open with seasonal occupancy restrictions, primarily for the protection shed, and cultural resource values. No land would be closed to oil and gas leasing.

Approximately 203,816 acres would be available for geothermal leasing under standard stipulations; about 239,315 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 31,767 acres would be available only with a "no surface occupancy" stipulation to protect recreation, watershed, and cultural resource values. No lands would be closed to geothermal leasing.

Non-energy mineral leasing would be permitted on 203,816 acres with standard stipulations. Approximately 239,315 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values. A total of 31,767 acres would be closed to solid mineral leasing for the protection of wilderness, recreation, watershed, and cul- tural resource values.

A total of 471,962 acres would be available for the location of mining claims and managed under the surface management regulations (43 CFR 3809). Included in this acreage is 24,922 acres that would be managed under the interim wilderness regulations and 590 acres that would remain open to location but be subject to superior rights because of mineral material sites and community pit designations. A total of 2,346 acres would be closed to mineral entry for the protection of cultural resources and developed recreation sites.

Mineral material disposal would be allowed on 447,631 acres of the resource area. A total of 27,267 acres would be closed to protect wilderness, recreation, watershed, and cultural resource values.

Forest Management

Intensive forest management activities would occur on 30,309 acres of available commercial forest land under existing regulations and restrictions. Of this acreage, 2,283 acres are within the Eighteenmile Wilderness Study Area. This commercial forest land would be managed in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review until a final decision was issued by Congress on wilderness designations.

The adoption of the Timber Production Capability Classifications would withdraw 6,046 acres of nonsuitable commercial forest land from the timber production base. No other set-asides or multiple use restrictions would be imposed.

Limited forest management practices would be applied to 26,269 acres of woodland to increase the production of non-sawtimber products such as firewood and Christmas trees.

Range

The planning area would be managed to maintain existing livestock use. Under this alternative 2,978 acres of fair and poor condition range would be improved to good condition and existing livestock use levels would continue. The 5-year average use of 52,541 animal unit months (AUMs) is proposed even though active preference is 63,898 AUMs.

The long-term stocking level would be 53,633 AUMs. When the active preference was adjusted to meet this level, reductions would be made on 39 allotments and increases would occur on 38. Eleven would remain unchanged.

Eight allotments are presently under intensive management with developed grazing systems and would continue to be managed this way. These allotments are South Carmen Creek, Geertson Creek, Coal Mine Gulch, Hot Springs, Haynes Creek, Little Sawmill, Free Strip, and Center Ridge.

Grazing preference includes lands in a transfer category. If any grazing lands were actually transferred out of federal ownership, grazing preference would be decreased. Appendix B Table B-1, gives detailed information on transfer category lands.

The current level of monitoring would continue. Range improvements would be installed on a case-by-case basis to solve management problems or improve livestock distribution. Table 2-1 shows estimated project levels.

Wildlife

This is essentially a wildlife habitat maintenance alternative. Activities that could degrade habitat would be evaluated on a case-by-case basis. Conflict resolution would occur through negotiation and application of existing regulations and policy.

Seasonal restrictions on mineral leasing exploration and development would continue on about 240,000 acres. A 16,200-acre off-road vehicle restricted zone in the Agency Creek area would also remain in effect. Additional seasonal use restrictions would be established on an as-needed basis.

Existing game populations of about 7,470 deer, 1,974 elk, and 2,799 antelope would continue to utilize about 5,399 AUMs (cattle equivalent) of forage. However, no formal reservation would be made.

Project activity would be limited primarily to that needed to maintain existing habitat or habitat access. Approximately 30 miles of fencing within heavily used deer, elk, or antelope habitat would be modified to bring them into accord with existing resource area policy. Four additional 500-gallon guzzlers would be constructed to provide more consistent water availability for antelope, sage grouse, and nongame species on about 18,000 acres.

Habitat improvement projects would consist of small-scale, low-key efforts such as installation of a few osprey or goose nesting platforms or similar facilities.

Watershed and Fisheries

Under this alternative, no watershed or riparian areas would be improved. Livestock management would remain unchanged and timber harvest activity would continue at its present rate.

BLM would maintain 97.7 miles of fisheries habitat in their present condition. This total includes 9.5 miles of the Salmon River and 1.2 miles of Hayden Creek categorized as Class I stream in accordance with the Idaho Department of Fish and Game 1978 Stream Classification System. A total of 1.8 miles of Big Timber Creek would be maintained as Class II and 3.0 miles of Eighteenmile as class III. The remaining 82.2 miles of unclassified stream would receive little or no management attention.

Surface-disturbing activities that would affect fisheries habitat would not be allowed. Current BLM fisheries habitat would be retained under federal control. Stabilization projects would be considered in areas with unstable banks.

Recreation

This alternative would continue existing levels of recreation management throughout the resource area. The special recreation management area (SRMA) designations for the Salmon River, Continental Divide National Scenic Trail, and Lewis and Clark National Historic Trail would be retained. A recreation area management plan (RAMP) would be completed for the Salmon River (currently being written). RAMPs would not be written for the two national trails, where management emphasis would be simply to indicate through signing the general trail routes.

The recreation opportunity spectrum (ROS) classes identified during inventory would be adopted. Lands would be categorized in the primitive (.8 percent), semi-primitive nonmotorized (2.8 percent), semi-primitive motorized (3.8 percent), roaded natural (90.6 percent), and rural (2 percent) classes. Although ROS settings would be adopted, no specific actions would be implemented to protect or enhance the setting opportunities.

Motorized use would continue to occur randomly throughout the resource area. BLM would continue to limit vehicle use during winter months on 16,230 acres (3.5 percent of the RMP area) of big game winter range and to limit use to existing roads and trails on the 24,922 acres of the Eighteenmile WSA (5.4 percent of the RMP area) until Congress made a final decision on wilderness status. A total of 16,640 acres would be closed to ORV use to maintain existing primitive and semi-primitive nonmotorized settings. All other lands would be open to off-road vehicle use (426,696 acres or 91.1%).

Visual resources would be managed on a case-by-case basis according to inventoried management classes. Interim visual resource management Class I designations for the Salmon River and Eighteenmile WSA would remain until Congress chose either designation or nondesignation.

BLM's visual resource management classes would be Class I (interim), 29,327 acres; Class II, 15,720 acres; Class III, 183,200 acres; and Class IV, 231,319 acres.

Four recreation sites presently withdrawn from mineral entry or disposal would continue to be so protected. Three developed recreation sites not currently withdrawn would remain open to mineral entry. Additional recreation sites would not be developed.

Wilderness

No lands would be recommended for wilderness. Management emphasis would be on nonwilderness uses, just as it was prior to the wilderness study process. Given the absence of any existing land use plan, this is the de facto "existing situation."

Fire

Full suppression fire management guidelines would be followed on 459,566 acres. All developed recreation sites and potential development sites would be under suppression restrictions, i.e, no retardant, no heavy equipment, and no fire line explosives. Prescribed burns for vegetation manipulation would be conducted on 3,200 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 1,000 acres to decrease the likelihood of having a disastrous fire.

Cultural Resources

Cultural resources would be managed so that representative samples of the full range of scientific and socio-cultural values were maintained consistent with state and federal laws. The 40-acre Chief Tendoy Cemetery would be protected by developing a cultural resource management plan for the 40-acre cemetery and maintaining the existing mineral withdrawal. No-surface-occupancy restrictions would be imposed on mineral leasing.

ALTERNATIVE B

Goal: This alternative emphasizes livestock grazing management. It represents an optimistic outlook for livestock grazing, given present and anticipated future budget levels.

The main objective would be to improve livestock forage production to the potential of each range site while maintaining existing ecological condition. This would be accomplished by developing allotment management plans to facilitate development of new range improvement projects and by adjust-to facilitate development of new range improvement projects and by adjusting livestock use to emphasize livestock production. Land transfer and acquisition actions that enhanced grazing management would be emphasized.

Map 6 illustrates the lands selected for transfer (3,419 acres) and the multiple use lands (456,147 acres) under Alternative B.

Lands

Under this alternative, BLM would consider for transfer 3,419 acres from federal ownership through public sales or exchanges. This acreage would consist of small, isolated parcels of public land and parcels with unauthorized private uses. Public access to these is limited in most cases and the parcels are considered too small to effectively manage as grazing allotments. Detailed examinations would be conducted on these parcels prior to any transfer action.

A total of 456,147 acres of public land would be retained. This includes 6,192 acres having soils with potential for agricultural development that would be retained to help meet the objective of increasing livestock forage. The classification for retention of 422,578 acres under the Classification and Multiple Use Act would be canceled because it would be redundant.

BLM would attempt to acquire 600 acres of private land and 4,360 acres of state land.

Right-of-way development could occur with no restrictions on 440,365 acres. Restrictions would be imposed on 4,405 acres. A total of 14,796 acres would be closed to right-of-way development.

Energy and Minerals

Under this alternative the objective would be to manage 475,593 acres of federal mineral estate in a manner that would encourage exploration and development while minimizing unavoidable impacts to other resources. To accomplish this objective, a total of 193,416 acres would be open for oil and gas leasing with the standard stipulations; another 214,804 acres would be open with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 52,577 acres would be leased with a "no surface occupancy" stipulation for the protection of recreation, watershed, and cultural resource values. A total of 14,796 acres would be closed to oil and gas leasing as part of the recommendation for wilderness designation of a portion of the Eighteenmile Wilderness Study Area (WSA).

About 191,921 acres would be available for geothermal leasing with standard stipulations; 214,804 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values; and 52,577 acres would be leased only with the "no surface occupancy" stipulation to protect recreation, watershed, and cultural resource values. A total of 15,596 acres would be closed to geothermal leasing for recreational development and as part of the recommendation for wilderness designation of a portion of the Eighteenmile WSA.

Solid mineral leasing would be permitted on 191,891 acres under the standard stipulations. About 215,634 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values. A total of 67,373 acres would be closed to solid mineral leasing for the protection of recreation, watershed, and cultural resource values and as part of the recommendation of wilderness designation for a portion of the Eighteenmile WSA.

A total of 455,569 acres would be open for the location of mining claims and managed under the surface management regulations. About 18,789 acres would be closed to mineral entry by the recommendation for wilderness designation of a portion of the Eighteenmile WSA and to protect developed recreation sites and cultural resource values. An additional 540 acres would be open to location but subject to superior rights established by community pit or material site designations.

Mineral material disposals would be allowed on 408,240 acres of the resource area. A total of 66,658 acres would be closed to mineral material disposal by the recommendation for wilderness designation of a portion of the Eighteenmile WSA and for the protection of recreation, watershed, and cultural resource values.

Forest Management

In this alternative, 27,726 acres of available commercial forest land would be intensively managed for the sustained yield production of timber. Of this acreage, 2,275 acres would receive restricted management to reduce the impacts to critical elk winter range. These restrictions would be designed primarily to maintain adequate hiding and thermal cover for wintering elk herds. Such restrictions would most commonly be applied to the layout and design of timber sales. Examples of methods which would be employed in the long-term management of these restricted stands include extended rotations, minimal clearcutting, and additional reserve areas.

Set-asides included in this alternative would reduce the timber production base. These specific set-asides include 15 acres for protection of the Williams Creek Recreation Site, 656 acres for protection of the Continental Divide National Scenic Trail, and 1,912 acres for protection of visual qualities of the existing landscape within the proposed wilderness boundaries and primitive/semi-primitive nonmotorized recreation opportunity settings in the Eighteenmile area.

Under this alternative, 5,514 acres of woodland would be closed to woodland product sales (firewood cutting, Christmas tree sales, etc.). These closures would be aimed at preservation of the visual qualities of the existing landscape in selected areas with high recreation and wilderness values. Acreages for these areas include 1,615 acres in primitive/semi-primitive nonmotorized Recreation Opportunity Spectrum classes in the Eighteenmile area, 622 acres along the 1/4-mile-wide Continental Divide Trail corridor, and 3,277 acres within the proposed wilderness boundaries.

All available commercial forest land within the Eighteenmile WSA would be managed in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review until a final decision was issued by Congress on wilderness designation.

The adoption of Timber Production Capability Classifications would withdraw 6,046 acres of nonsuitable commercial forest land from the timber production base.

Limited forest management practices would be applied to 20,755 acres of woodland to increase the production of non-sawtimber products such as firewood and Christmas trees.

Range

The planning area would be managed to maintain and/or improve each range site to its potential. This would involve maintaining or improving existing perennial forage plants, maintaining soil stability, stabilizing areas currently in downward trend, and increasing the availability of perennial forage plants. Under this alternative, 138 acres of fair and poor condition range would be improved to good condition (see Watershed and Fisheries).

Range improvements would be implemented to help achieve the above objectives. Proposed improvements include 24,606 acres of brush control, 13,438 acres of seeding, 50 springs, 81 miles of pipeline, 9 reservoirs, and 101 miles of fence, for a current estimated total cost of $1,465,290. Burning is the preferred method of brush control and would be used where ground cover was adequate to carry fire and species composition would allow recovery of desirable vegetation.

Short-term (less than five years) reductions would be made on 10 allotments and increases would occur on 8; 70 allotments would be unchanged, and 2 allotments currently unallotted (Dummy Creek and Big Dry Canyon) would be adjusted. For the management area as a whole, the initial stocking level of 61,190 AUMs would be above the 5-year average use but less than active preference. In the long-term, reductions would be made on 2 allotments and increases would occur on 73; 13 allotments would be unchanged. The long-term stocking level would be 70,836 AUMs.

Increases could occur up to full preference or beyond, depending on trend, utilization, actual use, and feasibility of range improvements. Range improvements on some allotments and existing forage production and facilities would allow for the proposed increases. The proposed grazing preference level assumes an optimistic future funding level for implementation of range improvements.

Grazing adjustments would be made over the 20-year life of the resource management plan. This would occur only after conducting monitoring studies and coordinating with the affected users.

The initial stocking level of 61,190 AUMs would be 16 percent higher than the current 5-year average actual use and slightly lower than the current active preference. There are several reasons for this:

- This alternative is designed to favor higher stocking levels.
- Although the current rate of 18 percent nonuse may continue into the future, the exact rate of nonuse is unpredictable. Actual use is tied to market conditions and other factors such as weather and fire. Thus, if this alternative were implemented, the initial stocking level of 61,190 AUMs may or may not be fully utilized. However, the initial stocking level of 61,190 AUMs is used for analysis of the environmental effects in the event it were fully utilized.
- The initial stocking level of 61,190 AUMs may not be supported in a drought year when forage production is low. This could require a temporary suspension of grazing privileges.

The initial stocking level of 61,190 AUM's would be based on monitoring data as discussed in Part I. Increases that depended on range improvements would occur only if funding for the necessary improvements was available and the projects were completed. Feasibility for project implementation would be studied on a case-by-case basis as the activity plans were developed.

Grazing preference includes lands in a transfer category. Decreases in preference resulting from land transfers would occur only as the identified tracts were transferred from federal ownership. See Appendix B, Table B-1, for detailed information on transfer category lands.

Changes in season of use would occur in some allotments where there was a conflict with other resource needs. Altered turnout dates and/or season of use may be used to improve range condition, improve vigor of perennial vegetation, and implement reductions needed to achieve management goals.

To implement this alternative, 55 allotment management plans would have to be developed (one for each allotment in the Improve category).

Wildlife

Under this alternative, wildlife habitat management would be constrained to a level compatible with the goals for range management. A total of 3,131 AUMs (cattle equivalent) of forage could be used by about 4,800 deer, 900 elk, and 2,200 antelope.

A minimum of two habitat management plans (HMPs) would be developed:

Species	Location	Acreage
Nongame/Waterfowl	Morgan Bar	16
Nongame/Waterfowl	Tower Creek Flats	40

About 5,500 acres of elk seasonal range would be enhanced through prescribed burning to increase grass and forb production and quality and to hold elk on areas seldom used by cattle. The acreage identified for burning assumes that adequate fuel loading would exist and that desirable fire-enhanced species would be present.

The installation of five 500-gallon guzzlers would provide a more consistent water supply on about 22,000 acres of antelope, sage grouse, and nongame habitat in the Gilmore and Muddy Creek areas. One mile of pipeline would be built from existing livestock water developments to augment the water supply of four of the guzzlers.

Big game movement and safety would be enhanced through modification of about 75 miles of fence in accord with Lemhi Resource Area fencing policy.

The future integrity of selected crucial habitats (the elk breeding area in McDevitt Creek; deer, antelope, and sage grouse winter range; the antelope migration corridor near Center Ridge; and others) would be secured through acquisition of about 4,360 acres of state land and 600 acres of private land.

The integrity and availability of 69,057 acres of crucial habitat for raptors, waterfowl, elk, etc., would be enhanced through adoption of no-surface-occupancy restrictions on mineral leasing, exploration, and development. the availability of an additional 223,400 acres of habitat would be assured through seasonal restrictions on mineral activity.

About 2,300 acres of crucial elk winter habitat would be protected through restrictions on timber management and harvest. Bighorn sheep health protection would be addressed by shifting all domestic sheep use to cattle use from Little 8-Mile to Eighteenmile.

Watershed and Fisheries

To partially counteract the adverse effects of increased livestock use, 9.5 miles of perennial stream riparian area would be fenced to exclude livestock. The areas include Cow Creek (1.5 miles), McDevitt Creek (3.0 miles), Pattee Creek (3.0 miles), and Sevenmile Creek (2.0 miles).

Watershed activity plans would be written for the Sevenmile-Hot Springs Creek, McDevitt-Muddy Creek, Warm Springs-Pattee Creek, and Freeman-Geertson Creek areas. These plans would use the final RMP as a starting point to propose specific actions for these four areas to improve watershed conditions.

Under this alternative 94.7 miles of stream would either be maintained in their present fisheries habitat condition or would be allowed to decline. Three miles of stream (McDevitt Creek) would be improved from fair condition to good condition. Improvement of 2.0 miles of a tributary to the Class 1 rated Salmon River (Sevenmile Creek) would also be sought under this alternative.

New timber harvest roads would be closed at the completion of timber sales except as needed for forest and fire management. Minimum streamflows on Big Timber Creek would be applied for as identified in the Instream Flow Study conducted by the Idaho Fish and Game Department for BLM.

Recreation

This alternative would enhance recreation management by defining special recreation management area (SRMA) boundaries, emphasizing visual resource management in the SRMAs, and protecting recreation sites by using mineral entry withdrawals. The SRMA designations for the Salmon River, Continental Divide National Scenic Trail, and Lewis and Clark National Historic Trail would be retained. A recreation area management plan (RAMP) would be written for each SRMA. (The Salmon River RAMP is currently being written.)

The Salmon River SRMA would include 4,405 acres. River access recreation sites would be constructed at Camp Creek and Elevenmile. This alternative recognizes the recreational values of the river corridor but assumes that Congress will not soon authorize a formal Wild and Scenic River study. Visual resources would be managed under class II guidelines. The interim VRM Class I designation would be dropped.

The Continental Divide National Scenic Trail SRMA would include 4,600 acres that would result from establishing a trail corridor one-quarter mile on either side of the proposed treadway (BLM CDNST Management Option Plan 1980). Visual resources within the corridor would be managed under Class II guidelines. This alternative proposes the withdrawal of 656 acres of commercial forest land from the timber production base and commercial woodland product sales. An additional 622 acres of noncommercial forest would be withdrawn from commercial woodland product sales.

The Lewis and Clark National Historic Trail SRMA would include 9,080 acres that would result from establishing a corridor wide enough to retain the natural aspects of the historic trail route. Visual resources within the corridor would be managed under Class II guidelines. Withdrawal of 1,820 acres from mineral entry would minimally protect the trail route identified through study of Lewis and Clark's journals (BLM 1980; personal communication with David Ainsworth).

Recreation opportunities in the recreation opportunity spectrum (ROS) classes would remain similar to the existing situation. The suitable wilderness recommendation (see Wilderness) would increase the semi-primitive nonmotorized class by 2,182 acres. Lands would be designated in the primitive (.8 percent), semi-primitive nonmotorized (3.3 percent), semi-primitive motorized (3.3 percent), roaded natural (90.6 percent) and rural (2 percent) opportunity classes.

Lands open to unrestricted vehicle use would total 424,514 acres (92.4 percent). Recreational off-road vehicle use would continue to be limited by BLM during winter months on 16,230 acres of big game winter range. A year-round closure to all vehicle use would be placed on 18,822 acres because of ROS and wilderness management restrictions. These acreage figures represent 3.5 and 4.1 percent of the RMP area, respectively.

For visual resources management, the following designations would be made: Class I (wilderness), 14,796 acres; Class II, 32,805 acres; Class III, 180,880 acres; and Class IV, 231,085 acres. No interim classes would remain.

Existing and planned investments in developed recreation sites would be protected by withdrawal of 186.75 acres from mineral entry. However, revocation of existing withdrawals on 640.14 acres no longer required for recreation program management would be recommended. An additional 800 acres at Sharkey Hot Springs would be closed to geothermal leasing subject to valid existing rights. The setting aside of 15 acres of productive timber in the existing Williams Lake Campground would be necessary.

Wilderness

This alternative recommends 14,796 acres for wilderness designation and 10,126 acres for nonwilderness uses. Following Congressional designation, a wilderness management plan would be prepared. The nonwilderness acres would be managed to retain existing ROS opportunity classes. Approximately 1,912 acres of commercial forest land would be set aside from the timber production base to protect designated wilderness and maintain ROS classes.

If Congress did not accept the suitable recommendation, the 14,796 acres would be managed to maintain existing recreation opportunity spectrum (ROS) classes. Approximately 1,826 acres would be withdrawn from the timber production base.

Fire

Full suppression fire management guidelines would be followed on 444,770 acres. Under this alternative, 14,796 acres would be managed under suppression restrictions to maintain wilderness quality. All developed recreation sites and sites identified as potential development sites would also be placed under suppression restrictions, i.e., no retardant, no heavy equipment, and no fire line explosives. Prescribed burns for vegetation manipulation would be conducted on 35,115 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural Resources

Cultural resources would be managed so that representative samples of the full range of scientific and socio-cultural values were maintained consistent with state and federal laws.

Five areas/complexes would be protected through special management. The five areas are:

1. Chief Tendoy Cemetery
2. Lewis and Clark Trail
3. Salmon River Corridor
4. Indian Area A
5. Indian Area B

Cultural resource management plans would be written for all five areas. The Salmon River Corridor plan would cover only the BLM administered public lands along the river. All plans would be implemented when completed.

ALTERNATIVE C

Goal: This alternative emphasizes wildlife and fisheries habitat enhancement, wilderness and recreational values, cultural resource management, and watershed protection.

Wildlife and fisheries habitat would be managed for species richness and diversity as well as to provide for future habitat integrity. This would be accomplished by developing habitat management plans, doing vegetative manipulation, excluding grazing on critical aquatic and riparian areas, and improving ecological range condition. Areas of critical wildlife habitat would have allotment management plans developed to benefit primarily wildlife.

Wilderness values would be emphasized by recommending the Eighteenmile wilderness study area for wilderness designation. Recreation area management plans and protective withdrawals would be developed for the Continental Divide and Lewis and Clark Trails, developed campsites, and the Salmon River. The Salmon River would be managed as if it were designated as a "recreational" Wild and Scenic River.

Cultural resource objectives would be reached through cultural resource management plans, protective withdrawals, and National Register designations.

Livestock use adjustments and exclusions would be used to protect watersheds. Watershed activity plans would be completed.

Map 7 illustrates the lands selected for transfer (5,267 acres) and the multiple use lands (454,299 acres) under Alternative C.

Lands

Under this alternative, BLM would consider for transfer 4,077 acres consisting of small isolated parcels with limited public access. Transfer actions would primarily be accomplished through land exchanges. The objective would be aimed at acquisition of private and state lands and con-

consolidation of public lands to enhance wildlife management. Included in this total is 160 acres that would be transferred by exchange only. These parcels are small, isolated and contain wildlife and riparian habitat. A land exchange would only be considered if the private lands, to be acquired, also contain wildlife and riparian habitat and if the parcels are adjacent to other public land. This would increase management efficiency without losing any habitat.

Transfer by public sales could also take place, on all except the 160 acres, if exchanges are not feasible. Detailed examinations would take place to determine if the land should be transferred and what type of transfer should be used.

BLM would also consider for transfer 1,190 acres under the Desert Land Act, as amended. These parcels contain Class III or better soils and may be suitable for agricultural development. Detailed examinations would be conducted on these parcels prior to any transfers.

A total of 454,299 acres of public land would be retained. In addition, BLM would attempt to acquire 1,240 acres of private land and 4,360 acres of state land. The classification for retention of 422,578 acres under the Classification and Multiple Use Act would be cancelled because it would be redundant.

Right-of-way development could occur with no restrictions on 430,239 acres. Restrictions would be imposed on 4,405 acres. A total of 24,922 acres would be closed to right-of-way development.

Energy and Minerals

Under this alternative the objective would be to manage 475,593 acres of federal mineral estate in a manner that would allow for exploration and development while minimizing impacts to other resources. To accomplish this objective, a total of 180,396 acres would be open for oil and gas leasing with the standard stipulations; another 174,319 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 91,526 acres would be leased only with a "no surface occupancy" stipulation for the protection of recreation, watershed, and cultural resource values. Approximately 29,352 acres would be closed to oil and gas leasing, including 24,922 acres recommended for wilderness designation.

About 179,701 acres would be available for geothermal leasing with standard stipulations; 174,319 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 90,726 acres would be available only with a "no surface occupancy" stipulation for the protection of recreation, watershed, and cultural resource values. About 30,152 acres would be closed to geothermal leasing, including an 800-acre recreational development and 24,922 acres of lands recommended for wilderness designation.

Solid mineral leasing would be permitted on 179,701 acres with standard stipulations. About 174,319 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values. A total of 120,878 acres would be closed to solid mineral leasing as part of a recommendation for wilderness designation and for the protection of recreation, watershed, and cultural resource values.

A total of 438,805 acres would be open for the location of mining claims and managed under the surface management regulations. About 35,688 acres would be withdrawn from mineral entry by the recommendation for wilderness designation of the Eighteenmile Wilderness Study Area (WSA) and for the protection of developed recreation sites and cultural resource values. An additional 405 acres would be open to location but subject to superior rights established by community pit and material site designations.

Mineral material disposals would be permitted from 354,735 acres of the resource area. However, 120,163 acres would be closed to mineral material disposal by the recommendation for wilderness designation and for the protection of recreation, watershed, and cultural resource values.

Forest Management

Under this alternative, 27,355 acres of available commercial forest land would be intensively managed for the sustained yield production of timber. Of this acreage, 5,156 acres would receive restricted management to reduce the impacts to critical elk winter range. These restrictions would be designed primarily to maintain adequate hiding and thermal cover for wintering elk herds. Such restrictions would most commonly be applied to the layout and design of timber sales. Examples of methods which would be employed in the long-term management of these restricted stands include extended rotations, minimal clearcutting, and additional reserve areas.

An additional 910 acres of available commercial forest land would also be restricted to maintain the visual qualities of the existing landscape with the 1/2-mile-wide Continental Divide Trail corridor. Restricted stands within this corridor would be subject to such harvest practices as whole tree yarding with slash disposal at landings, cutting stumps flush with the soil surface, and blending clearcuts with the surrounding landscape by using irregularly shaped cutting areas. Any unnatural disturbances to the terrain in these areas would be renovated so that they would not be visually evident.

Set-asides included in this alternative would reduce the timber production base. These specific set-asides include 15 acres to protect the Williams Lake Recreation Site, 656 acres to protect the Continental Divide National Scenic Trail, and 2,283 acres to protect the Eighteenmile WSA.

Under this alternative, 6,809 acres of woodland would be closed to woodland product sales (firewood cutting, Christmas tree sales, etc.). These closures would be aimed at preservation of the visual qualities of the existing landscape in select areas with high recreation and wilderness values. Acreages for these areas include 622 acres within the 1/2-mile-wide Continental Divide Trail corridor and 6,187 acres within the Eighteenmile WSA boundaries.

All available commercial forest land within the Eighteenmile WSA would be managed in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review until a final decision was issued by Congress on wilderness designation.

The adoption of Timber Production Capability Classifications would withdraw 6,046 acres of nonsuitable commercial forest land from the timber production base.

Limited forest management practices would be applied to 19,460 acres of woodland to increase the production of non-sawtimber products such as firewood and Christmas trees.

Range

The planning area would be managed to enhance wildlife and recreational values. The objective for this alternative would be to maintain existing perennial forage plants, maintain soil stability, and stabilize areas currently in downward trend. Under this alternative, 56,898 acres of fair and poor condition range would be improved to good condition.

Range improvements would be only those necessary to correct areas of declining condition or to improve management condition in the area. Proposed improvements include 7,490 acres of brush control, 5,400 acres of seeding, 31 springs, 58 miles of pipeline, 11 reservoirs, and 42 miles of fence, for a current estimated total cost of $617,826. Burning is the preferred method of brush control and would be used where ground cover was adequate to carry fire and where species composition would allow recovery of desirable vegetation.

Short-term (less than 5 years) reductions would be made on 75 allotments and increases would occur on 7; 4 allotments would be unchanged. Two allotments -- Dummy Creek and Big Dry Canyon -- would be completely closed to livestock grazing for the benefit of wildlife. For the management area as a whole, the initial stocking level of 29,921 AUMs would be below the 5-year average use and substantially below active preference. In the long term, reductions would be made on 66 allotments and increases would occur on 11; 9 allotments would be unchanged. The long-term stocking level would be 37,064 AUMs.

Increases could occur up to full preference or beyond, depending on trend, utilization, actual use, and feasibility of range improvements. Range improvements on some allotments and existing forage production and facilities would allow for the proposed increases. The grazing preference level proposed assumes a minimal future funding level for implementation of range improvements.

Grazing adjustments would be made over the 20-year life of the resource management plan. This would occur only after conducting monitoring studies and coordinating with the affected users.

Those allotments that required a reduction in grazing use would be reduced over a 5-year period through the use of monitoring. See Appendix B for allotments that would receive increases and decreases.

The initial stocking level of 29,921 AUMs would be 43 percent lower than the current 5-year average actual use and 53 percent lower than current active preference. There are several reasons why this stocking level was chosen.

- No conflicts with other resources were identified at the proposed stocking level.
- The methodology used to determine the proposed stocking level indicates that the objectives for livestock forage could be met at this stocking level with the range improvements listed above.
- Although the current rate of 18 percent nonuse may continue into the future, the exact amount of nonuse is unpredictable. Actual use is tied to market conditions and other factors such as weather and fire. Thus, if this alternative were implemented, the initial stocking level of 29,921 AUM's may or may not be fully utilized. However, the initial stocking level of 29,921 AUMs is used for analysis of the environmental effects in the event it were fully utilized.
- The initial stocking level of 29,921 AUMs for Alternative C could be supported in a drought year when forage production was low.
- Allotment management plans would emphasize management of elk and bighorn sheep habitat.
- A total of 48,000 acres would be managed primarily to benefit elk.
- BLM would pursue sheep-to-cow conversions and would not allow cattle-to-sheep changes from Little 8-Mile drainage south to Dry Canyon drainage. This strategy would be carried out to enhance bighorn sheep habitat.
- Total exclusion of livestock grazing would occur on 22 miles of riparian and aquatic areas (see Fisheries).

The initial stocking rate of 29,921 AUMs would occur based on monitoring data as discussed in Part 1. Increases that depended on range improvements would occur only if funding for the necessary improvements was available and the projects were completed. Feasibility for project implementation would be handled on a case-by-case basis as the activity plans were developed.

Grazing preference includes lands in a transfer category. Decreases in preference resulting from land transfers would occur only as the identified tracts were transferred from federal ownership. See Appendix B, Table B-1, for detailed information on the transfer category lands.

Changes in season of use would occur on some allotments where there was a conflict with other resource needs. Altered turnout dates and/or season of use may be used to improve range condition, improve vigor of perennial vegetation, and implement reductions needed to achieve management goals.

To implement this alternative, 55 allotment management plans would have to be developed (one for each allotment in the Improve category).

Wildlife

Under this alternative, wildlife habitat protection and enhancement would be one of the primary management goals for the resource area. The emphasis would be on habitat protection, particularly from a minerals, livestock, and forestry restriction standpoint. Habitat conditions for most terrestrial species would be optimized at levels felt to be realistic, allowing for the inherent limitations of the resource and BLM's ability to impose restrictions on competing activities.

A minimum of six habitat management plans (HMPs) would be developed:

Species	Location	Acreage
Elk/Deer	Haynes Cr. to Hayden Cr.	54,000
Elk/Deer	Kenney Cr. to Peterson Cr.	58,000
Elk/Bighorn	Little 8-Mile to Eighteenmile	28,000
Antelope/Sage grouse	Leadore to Blue Dome	120,000
Nongame/Waterfowl	Morgan Bar	16
Nongame/Waterfowl	Tower Creek Flats	40

Under this alternative, 7,722 AUMs (cattle equivalent) of forage would be reserved to support an estimated 10,470 deer, 2,847 elk, 2,950 antelope, and 400 bighorn sheep.

Approximately 8,000 acres of elk and bighorn sheep winter/spring range; about 48,000 acres of deer, antelope, and sage grouse seasonal ranges; and about 56,000 acres of nongame habitat would be improved through joint range/wildlife HMP and allotment management plan (AMP) development that would be designed to raise ecological range condition from fair to good. An additional 7,320 acres of seasonal elk and bighorn sheep ranges would be enhanced through prescribed burning to increase grass/forb production and quality. Acreage identified for burning assumes adequate fuel loading and desirable fire-enhanced species are present.

Forage quality and quantity for waterfowl would be improved on about 40 acres of riverine habitat through prescribed burning.

A more consistent water supply would be provided on 81,000 acres of antelope, sage grouse, and nongame habitat in the Gilmore and Muddy Creek areas by installing eighteen 500-gallon guzzlers. Six miles of pipeline would be built from existing livestock water developments to augment the water supply to seven of the guzzlers. Approximately 2 1/2 miles of fencing would be used to construct individual exclosures around the guzzlers.

Habitat values of about 30 small isolated seeps and wet meadows created by overflow from livestock water developments would be preserved and enhanced. About 3 to 4 miles of fencing would be required.

Big game movement and safety would be enhanced through modification of about 154 miles of fence in accord with Lemhi Resource Area fencing policy.

The future integrity of selected crucial habitats (elk breeding area in McDevitt Creek; deer, antelope, and sage grouse winter range; antelope migration corridor near Center Ridge; and others) would be secured through acquisition of about 4,960 acres of state land and 640 acres of private land.

The integrity and availability of 85,800 acres of crucial habitat for raptors, waterfowl, elk, etc., would be enhanced through adoption of no-surface-occupancy restrictions on mineral leasing, exploration, and development. Availability of an additional 196,900 acres of habitat would be assured through seasonal restrictions on mineral activity.

Habitat quality of 48,000 acres of elk winter range would be preserved and enhanced through restrictions on livestock use. Included within this acreage are 5,156 acres subject to timber management and harvest restrictions.

Watershed and Fisheries

Riparian areas along 22 miles of perennial streams would be fenced to exclude livestock, as would 100 spring developments. The areas include Cow Creek (1.5 miles), McDevitt Creek (3.0 miles), Pattee Creek (3.0 miles), Sevenmile Creek (2.0 miles), Muddy Creek (4.0 miles), Henry Creek (2.5 miles), the Beer Can Flats area of Freeman Creek (2.0 miles), and Yearian Creek (4.0 miles). In addition, livestock would be removed from pastures when 50 percent utilization of the riparian forage was reached. Spring turnout would be delayed until June 1 on all allotments containing highly erosive soils.

Watershed activity plans would be written for the Sevenmile-Hot Springs Creek, McDevitt-Muddy Creek, Warm Springs-Pattee Creek, and Freeman-Geertson Creek areas.

Under this alternative, 92.7 miles of stream would be maintained in their present fisheries habitat condition and 5.0 miles of stream (Haynes and McDevitt creeks) would be improved from fair and poor condition to good condition. Improvement of 4.0 miles of tributaries to the Class 1 rated

Salmon River would also be sought under this alternative. Surface-disturbing activities adversely affecting any Class III stream would not be allowed.

New timber harvest roads would be closed at the completion of timber sales except for use in timber and fire management. The Henry Creek road would be closed except for fire and range management.

The Sevenmile Creek and Hot Springs Creek watersheds (tributaries of the Salmon River) would no longer be used by livestock. Minimum streamflows on Big Timber Creek would be applied for as identified in the Instream Flow Study conducted by the Idaho Fish and Game Department for BLM.

Recreation

This alternative would recognize recreation as the principal use of the lands in the three special recreation management areas (SRMAs). Additional mineral withdrawals, restrictions on some nonrecreational uses, and restrictive visual management practices would be implemented. A recreation area management plan (RAMP) would be written for each SRMA. (The Salmon River RAMP is currently being written.)

The Salmon River SRMA would include 4,405 acres. River access recreation sites would be constructed at Camp Creek and Elevenmile. This alternative would manage the river as if it were a "recreational" wild and scenic river; however, Congressional direction for a formal Wild and Scenic River study is not anticipated. The river would be managed as a Class I visual resource management area. The 4,250 acres within the special recreation management area not now withdrawn from mineral entry would be withdrawn.

The Continental Divide National Scenic Trail SRMA would include 9,200 acres that would result from establishing a trail corridor one-half mile on either side of the proposed treadway. Visual resources within the corridor would be managed under Class II guidelines. This alternative would withdraw 656 acres of commercial forest land from the timber production base and from all woodland product sales.

Restricted management activities on an additional 910 acres are proposed in order to maintain existing visual qualities. Restrictions may be applied to size of harvest units, siting of roads, disposal of slash, and percentage of cover reduction. Approximately 622 acres of noncommercial forest land would be withdrawn from both commercial and private woodland product sales (firewood, fence posts, etc.) within the trail corridor.

The Lewis and Clark National Historic Trail SRMA would include 9,080 acres that would result from establishing a corridor wide enough to retain the natural aspects of the historic trail route. Visual resources within the corridor would be managed under Class I guidelines. Withdrawal of 2,810 acres from mineral entry would protect the trail route from disturbance. A no-surface-occupancy stipulation would be added to all leases within the SRMA.

Recreation opportunities in the recreation opportunity spectrum classes would remain similar to the existing situation. The suitable wilderness recommendation (see Wilderness) would increase the semi-primitive nonmotorized class by 6,100 acres. Lands would be designated in the primitive (.8 percent), semi-primitive nonmotorized (4.6 percent), semi-primitive motorized (2.0 percent), roaded natural (90.6 percent), and rural (2.0 percent) opportunity classes.

Lands open to unrestricted vehicle use would total 418,414 acres (91 percent). Recreational off-road vehicle use would continue to be limited during winter months on 16,230 acres of the big game winter range. A year-round closure to all vehicle use would be placed on 24,922 acres because of a wilderness designation. These acreage figures represent 3.5 and 5.5 percent of the RMP area, respectively.

For visual resources management, the following designations would be made: Class I, 38,407 acres; Class II, 22,920 acres; Class III, 180,680 acres; and Class IV, 217,559 acres. No interim classes would remain.

Existing and planned investments in developed recreation sites would be protected by withdrawal of 186.75 acres from mineral entry. An additional 800 acres at Sharkey Hot Springs would be closed to geothermal leasing, subject to valid existing rights. The setting aside of 15 acres of productive timber in the existing Williams Lake Campground would be necessary.

Wilderness

This alternative recommends 24,922 acres for wilderness designation. Following designation, a wilderness management plan would be prepared. Approximately 2,283 acres of commercial forest land would be set aside from the timber production base. The 24,922 acres would be withdrawn from mineral entry and leasing.

If Congress does not accept the recommendation, the 24,922 acres would be managed to maintain existing recreation opportunity spectrum classes. Approximately 1,826 acres would be withdrawn from the timber production base. A vehicle closure would remain on 16,640 acres.

Fire

Full suppression fire management guidelines would be followed on 434,644 acres. Under this alternative, 24,922 acres would be managed under suppression restrictions to maintain wilderness quality. All developed recreation sites and sites identified as potential development sites would also have suppression restrictions, i.e., no retardant, no heavy equipment, and no fire line explosives. Prescribed burns for vegetation manipulation would be conducted on 11,520 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural Resources

Cultural resources would be managed so that representative samples of the full range of scientific and socio-cultural values were maintained consistent with state and federal laws.

Seven areas/complexes would be protected through special management. The seven areas are:

1. Chief Tendoy Cemetery
2. Lewis and Clark Trail
3. Salmon River Corridor
4. Indian Head Site Area
5. Indian Area A
6. Indian Area B
7 Hawley Creek Canyon Complex

Cultural resource management plans would be written for all of these.

ALTERNATIVE D

Goal: This alternative emphasizes mineral development on the public lands. The objective is to manage the federal mineral estate to allow optimum exploration and development, while minimizing unnecessary impacts to other resources.

This objective would be met by imposing the least restrictive stipulations on mineral leasing activities, leaving areas open to leasing, and opening areas that are currently closed to mineral location.

The Eighteenmile WSA would not be recommended for wilderness designation and the Salmon River would not be considered eligible for any future Wild and Scenic studies.

Map 8 illustrates the lands selected for transfer (6,179 acres) and the Multiple Use lands (453,387 acres) under Alternative D.

Lands

Under this alternative, BLM would consider for transfer 3,629 acres from federal ownership through public sales or exchanges. This acreage would consist of small isolated parcels of public land and parcels with unauthorized private uses (primarily agricultural uses). Public access to these is limited in most cases and the parcels provide little benefit to the general public. Detailed examinations would be conducted on these parcels prior to any transfer action.

BLM would also consider for transfer 2,550 acres under the Desert Land Act, as amended. These parcels contain Class III or better soils and may be suitable for agricultural development. Detailed examinations would also be conducted on these parcels prior to any transfer actions.

A total of 453,387 acres of public land would be retained. BLM would attempt to acquire 480 acres of private land and 1,920 acres of state land. The classification for retention of 422,578 acres under the Classification and Multiple Use Act would be cancelled because it would be redundant.

Right-of-way development could occur with no restrictions on 455,161 acres. Restrictions would be imposed on 4,405 acres. No lands would be closed to right-of-way development.

Energy and Minerals

Under this alternative, the objective would be to manage 475,593 acres of federal mineral estate in a manner that would optimize mineral exploration and development while minimizing unavoidable impacts to other resources. To accomplish this, about 469,188 acres would be open for all mineral leasing with standard stipulations; there would be no seasonal restrictions. However, 6,405 acres would have "no surface occupancy" restrictions for the protection of developed recreation sites, watersheds, and cultural resource values. No lands would be closed to fluid mineral leasing. Solid mineral leasing would not be allowed on 6,405 acres to protect developed recreation sites and watershed and cultural resource values.

A total of 472,794 acres would be open for the location of mining claims. About 1,564 acres would be withdrawn from mineral entry, primarily for the protection of cultural resources and existing recreation developments; 540 acres would be open for location subject to superior rights established by community pit or mineral material site designation.

A total of 472,923 acres would be available for the disposal of mineral materials. However, 1,975 acres would be closed to protect recreation, watershed, and cultural resource values.

Forest Management

In this alternative, 30,294 acres of available commercial forest land would be intensively managed for the sustained yield production of timber. Of this acreage, 1,646 acres would be subject to restricted management to reduce the impacts to critical elk winter range. These restrictions would be designed primarily to maintain adequate hiding and thermal cover for wintering elk herds. These restrictions would most commonly be applied to the layout and design of timber sales. Examples of methods to be employed in the long-term management of these restricted stands include extended rotations, minimal clearcutting, and additional reserve areas.

An additional 656 acres of available commercial forest land would be restricted to ensure that management activities within the 1/4-mile-wide Continental Divide Trail corridor remained visually subordinate to the characteristic landscape. Restricted stands within this corridor would be subject to specific sale layout and harvest practices such as piling and burning logging slash, shaping clearcuts to blend with the surrounding landscape, and minimizing construction of haul roads and skid trails.

The only set-aside included in this alternative is 15 acres for the protection of the Williams Lake Recreation Site. This set-aside would reduce the timber production base accordingly.

All available commercial forest land with the Eighteenmile Wilderness Study Area (WSA) would be managed in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review until a final decision was issued by Congress on wilderness designation.

The adoption of the Timber Production Capability Classifications would withdraw 6,046 acres of nonsuitable commercial forest land from the timber production base.

Limited forest management practices would be applied to 26,269 acres of woodland to increase the production of non-sawtimber products such as firewood and Christmas trees.

Range

The planning area would be managed to enhance mineral development. The objective for this alternative would be to maintain or improve existing perennial forage plants, maintain soil stability, and stabilize areas currently in a downward trend. Under this alternative, 26,640 acres of fair and poor condition range would be improved to good condition and those allotments with the highest resource conflicts would be improved to the maintain (M) category.

Range improvements would be implemented to help achieve the above objectives. Proposed improvements include 14,000 acres of brush control, 17,500 acres of seeding, 30 springs, 41 miles of pipeline, 7 reservoirs, and 56 miles of fence, for a current estimated total cost of $683,900. Burning is the preferred method of brush control and would be used where ground cover was adequate to carry fire and species composition would allow recovery of desirable vegetation.

Short-term (less than five years) reductions would be made on 36 allotments and increases would occur on 12; 40 allotments would be unchanged. Two allotments, Dummy Creek and Big Dry Canyon, would be available for use on a temporary basis. For the management area as a whole, the initial stocking level of 53,803 AUMs would be above the 5-year average use but less than active preference. In the long term, reductions would be made on 22 allotments and increases would occur on 10; 56 allotments would be unchanged. The long-term stocking level would be 59,129 AUMs.

Increases could occur up to full preference or beyond, depending on trend, utilization, actual use, and feasibility of range improvements. Range improvements on some allotments and existing forage production and facilities would allow for the proposed increases. The proposed grazing preference level assumes an optimistic future funding level for implementation of range improvements.

Grazing adjustments would be made over the 20-year life of the resource management plan. These would occur only after conducting monitoring studies and coordinating with the affected users.

Those allotments that required a reduction in grazing use would be reduced over a 5-year period through the use of monitoring. See Appendix B for allotments that would receive increases and decreases.

The initial stocking level of 53,803 AUMs is 2 percent higher than the current 5-year average actual use and 16 percent lower than the current active preference. There are several reasons why this stocking level was chosen.

- This alternative favors higher stocking levels.
- Although the current rate of 18 percent nonuse may continue into the future, the exact rate of nonuse is unpredictable. Actual use is tied to market conditions and other factors such as weather and fire. Thus, if this alternative were implemented, the initial stocking level of 53,803 AUMs may or may not be fully utilized. However, the initial stocking level of 53,803 AUMs is used for analysis of the environmental effects in the event it were fully utilized.
- The initial stocking level of 53,803 AUMs may not be supported in a drought year when forage production is low. This could require a temporary suspension of grazing privileges.

The initial stocking level of 53,803 AUMs would occur based on monitoring data as discussed in Part I. Increases that depended on range improvements would occur only if funding for the necessary improvements was available and the projects were completed. Feasibility for project implementation would be handled on a case-by-case basis as the activity plans were developed.

Grazing preference includes lands in a transfer category. Decreases in preference resulting from land transfers would occur only as the identified tracts were transferred from federal ownership. See appendix B, Table B-1, for detailed information on transfer category lands.

Changes in season of use would occur in some allotments where there was a conflict with other resource needs. Altered turnout dates and/or season of use may be used to improve range condition, improve vigor of perennial vegetation, and implement reductions needed to achieve management goals.

To implement this alternative, 55 allotment management plans would have to be developed (one for each allotment in the Improve category).

Wildlife

The general wildlife objective under this alternative would be to attempt to hold habitat losses to a minimum and to offset losses that did occur.

A minimum of two habitat management plans (HMPs) would be developed:

Species	Location	Acreage
Elk/Deer	Haynes Cr. to Hayden Cr.	54,000
Elk/Deer	Kenney Cr. to Peterson Cr.	58,000

Under this alternative, 3,431 AUMs (cattle equivalent) of forage would be reserved to support an estimated 5,899 deer, 862 elk, and 1,866 antelope.

Approximately 3,000 acres of elk winter/spring range; about 22,000 acres of deer, antelope, and sage grouse seasonal ranges; and about 25,000 acres of nongame habitat would be improved. This would occur through joint range/wildlife HMP and allotment management plan (AMP) development that would be designed to raise ecological conditions from fair to good on about 25,000 acres.

Forage quality and quantity for waterfowl (ducks and geese) would be improved on about 25 acres of riverine habitat through prescribed burning. Waterfowl, shorebird, and other nongame species habitat would be developed on an indeterminate acreage of reclaimed flooded material (sand and gravel) pits along the Salmon River.

A more consistent water supply would be provided on 22,500 acres of antelope, sage grouse, and nongame habitat in the Gilmore and Muddy Creek areas by installing five 500-gallon guzzlers. About 1 mile of pipeline would be built from existing livestock water developments to augment the water supply to three of the guzzlers. Approximately three-quarters of a mile of fencing would be used to construct exclosures around the guzzlers.

Habitat values of about four small isolated seeps and wet meadows created by overflow from livestock water developments would be preserved and enhanced. About one-quarter to one-half mile of fencing would be required.

Big game movement and safety would be enhanced through modification of about 40 miles of fence in accord with Lemhi Resource Area fencing policy.

The future integrity of selected crucial habitats (elk breeding area in McDevitt Creek; deer, antelope, and sage grouse winter range; antelope migration corridor near Center Ridge; and others) would be enhanced through acquisition of about 1,920 acres of state land and 480 acres of private land.

Habitat quality of about 15,900 acres of elk winter range would be preserved and enhanced through restrictions on livestock use Included within this acreage are 1,646 acres subject to timber management and harvest restrictions.

Watershed and Fisheries

To partially counteract the adverse effects of increased livestock use, 11.5 miles of perennial stream riparian area and 100 spring developments would be fenced to exclude livestock. The areas include Cow Creek (1.5 miles), McDevitt Creek (3.0 miles), Pattee Creek (3.0 miles), Sevenmile Creek (2.0 miles), and the Beer Can Flats area of Freeman Creek (2.0 miles).

Watershed activity plans would be written for the Sevenmile-Hot Springs Creek, McDevitt-Muddy Creek, Warm Springs-Pattee Creek, and Freeman-Geertson Creek areas.

Under this alternative 94.7 miles of stream would either be maintained in their present fisheries habitat condition or would be allowed to decline. Three miles of stream (McDevitt Creek) would be improved from fair condition to good condition. In addition, improvement of 2.0 miles of a tributary to the Class 1 rated Salmon River (Sevenmile Creek) would be sought under this alternative.

New timber harvest roads would be closed at the completion of timber sales except as needed for forest and fire management. Minimum streamflows on Big Timber Creek would be applied for as identified in the Instream Flow Study conducted by the Idaho Fish and Game Department for BLM.

Surface-disturbing activities that would affect fisheries habitat would not be allowed. Current habitat would be retained under federal control. Stabilization projects would be considered in areas with unstable banks.

Recreation

This alternative would reduce recreation management to a level that provided for recreational use of the public lands but did not improve or maximize opportunities. No withdrawals or vehicle restrictions would be implemented.

The special recreation management area (SRMA) designations would be retained, and each would have a recreation area management plan (RAMP) prepared. (The Salmon River RAMP is currently being written.) The size of the SRMAs would be minimal: 4,405 acres in the Salmon River SRMA, 4,600 acres in the Continental Divide National Scenic Trail SRMA, and 1,800 acres in the Lewis and Clark National Historic Trail SRMA. The Salmon River would be managed as if it were not eligible for any wild and scenic designation. No future study would be anticipated. Management of the two national trails would be aimed primarily towards retention of a continuous treadway. Restricted forest management on 656 acres of commercial forest land would minimize impacts on visual quality within the Continental Divide National Scenic Trail corridor.

Recreation opportunities would be provided in the roaded natural (450,291 acres) and rural (9,275 acres) experience settings. Roads would be allowed in lands inventoried in the primitive, semi-primitive nonmotorized, and semi-primitive motorized recreation opportunity spectrum (ROS) classes if mineral exploration and development or timber harvest activities occurred. All lands in the resource area would be open to unrestricted off-road vehicle use.

For visual resource management, the following designations would be made: 203,325 acres as Class III and 256,241 acres as Class IV. No interim classes would remain.

The amount of land withdrawn from mineral entry for recreational purposes would decrease by 640.14 acres to 282.59 acres through the revocation of withdrawals on lands no longer required for recreation management. No withdrawals are proposed for existing recreation sites not now withdrawn.

Wilderness

This alternative recommends the 24,922 acres in the Eighteenmile Wilderness Study Area (WSA) for nonwilderness uses. Road construction for mineral exploration and development and timber harvesting would be allowed. Until Congress made a final wilderness decision, the WSA would be managed under BLM's Interim Management Policy for Lands Under Wilderness Review.

Fire

Full suppression fire management guidelines would be followed on 459,566 acres. The only areas that currently have suppression restrictions placed on them are developed recreation sites and potential for development sites. No more areas would be placed in the restricted category except as mentioned in the Standard Operating Procedures (Part I). Under this alternative, 18,450 acres would be burned for vegetation manipulation. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire. Upon completion and approval of the RMP, activity plans will be completed to accomplish the direction of the RMP guidance.

Cultural Resources

Cultural resources would be managed so that representative samples of the full range of scientific and socio-cultural values were maintained consistent with state and federal laws.

Three areas would be protected through special management: the 40-acre Chief Tendoy Cemetery, Indian Area A, and Indian Area B. Cultural resource management plans would be written for these three areas.

ALTERNATIVE E

Goal: This alternative emphasizes intensive management on 30,309 acres of commercial forest land for sustained yield production. There would be 20,100 acres of noncommercial forest lands that would be available for limited harvest of sawtimber, fuelwood, and other minor forest products.

Within commercial forest areas, wildlife and fisheries habitat and watershed conditions would be maintained. Outside of commercial forest areas, these resource values would be maintained or enhanced. The Eighteenmile Wilderness Study Area would be recommended as nonsuitable for wilderness designation. Portions of the Continental Divide Trail would be included in the commercial timber base.

More land would be transferred from federal ownership than under any other alternative.

Map 9 illustrates the lands selected for transfer (10,397 acres) and the multiple use lands (449,169 acres) under Alternative E.

Lands

Under this alternative, BLM would consider 5,087 acres for transfer from federal ownership through public sales or exchanges. This acreage would consist of small isolated parcels of public land and parcels with unauthorized private uses (primarily agricultural uses). Public access to these is limited in most cases and the parcels provide little benefit to the general public. Detailed examinations would be conducted on these parcels prior to any transfer action.

BLM would also consider 5,310 acres for transfer under the Desert Land Act, as amended. These parcels contain Class III or better soils and may be suitable for agricultural development. Detailed examinations would also be conducted on these parcels prior to any transfer actions.

A total of 449,169 acres of public land would be retained. BLM would attempt to acquire 480 acres of private land and 1,160 acres of state land. The classification for retention of 422,578 acres under the Classification and Multiple Use Act would be cancelled because it would be redundant.

Right-of-way development could occur with no restrictions on 459,566 acres. No restrictions or closures would occur.

Energy and Minerals

Under this alternative, the objective would be to manage 475,593 acres of federal mineral estate in a manner that would encourage exploration and development while minimizing unavoidable impacts to other resources. To accomplish this objective, a total of 175,121 acres would be open for oil and gas leasing with standard stipulations; another 264,003 acres would be with a "no surface occupancy" restriction for the protection of recreation, watershed, and cultural resource values. There would be no lands closed to oil and gas leasing.

About 173,626 acres would be available for geothermal leasing with standard stipulations; 264,003 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 36,469 acres would be available only with a "no surface occupancy" stipulation to protect recreation, watershed, and cultural resource values. An additional 800 acres would be closed to geothermal leasing to allow for recreational development.

Solid mineral leasing would be permitted on 174,426 acres under standard stipulations. About 264,003 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values. A total of 36,469 acres would be closed to solid leasing for the protection of wilderness, recreation, watershed, and cultural resource values.

A total of 469,388 acres would be open for the location of mining claims and managed under the surface management regulations. About 4,970 acres would be withdrawn from mineral entry to protect developed recreation sites and watershed and cultural resource values. An additional 540 acres would be open for mineral entry but subject to superior rights established by mineral material site and community pit designations.

Mineral material disposals would be permitted from 439,052 acres of the resource area. However, 35,846 acres would be closed to mineral material disposal for the protection of wilderness, recreation, watershed, and cultural resource values.

Forest Management

Under this alternative, 30,309 acres of available commercial forest land would be intensively managed for the sustained yield production of timber. Of this acreage, 2,283 acres are within the Eighteenmile Wilderness Study Area (WSA). This commercial forest land would be managed in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review until a final decision was issued by Congress on wilderness designation.

The adoption of Timber Production Capability Classifications would withdraw 6,046 acres of nonsuitable commercial forest land from the timber production base. No other set-asides or multiple use restrictions would be imposed.

Limited forest management practices would be applied to 26,269 acres of woodland to increase the production of non-sawtimber products such as firewood and Christmas trees.

Range

The planning area would be managed for multiple uses. The objective for this alternative would be to maintain or improve existing perennial forage plants, maintain soil stability, and stabilize areas currently in a downward trend. Under this alternative, 17,976 acres of fair and poor condition range would be improved to good condition and all I (improve) category allotments would be improved to M (maintain).

Range improvements would be implemented to help achieve the above objectives. Proposed improved investments include 22,700 acres of brush control, 4,400 acres of seeding, 32 springs, 50 miles of pipeline, 4 reservoirs, and 63 miles of fencing, for a current estimated total cost of $787,947. Burning is the preferred method of brush control and would be used where ground cover was adequate to carry fire and species composition would allow recovery of desirable vegetation.

Short-term (less than five years) reductions would be made on 47 allotments and increases would occur on 8; 33 allotments would be unchanged. Two allotments, Dummy Creek and Big Dry Canyon, would be available for use on a temporary basis. For the management area as a whole, the initial stocking level of 49,589 AUMs would be below the 5-year average use and less than active preference. In the long term, reductions would be made on 36 allotments and increases would occur on 14; 38 allotments would be unchanged. The long-term stocking level would be 55,465 AUMs.

Increases could occur up to full preference or beyond, depending on trend, utilization, actual use, and feasibility of range improvements. Range improvements in some allotments and existing forage production and facilities would allow for the proposed increases. The grazing preference level proposed assumes a realistic future funding level for implementation of range improvements.

Grazing adjustments would be made over the 20-year life of the resource management plan. These would occur only after conducting monitoring studies and coordinating with the affected users.

Those allotments that required a reduction in grazing use would be reduced over a 5-year period through the use of monitoring. See Appendix B for allotments that would receive increases and decreases.

The initial stocking level of 49,589 AUMs would be 6 percent lower than the current 5-year average actual use and 22 percent lower than the current active preference. There are several reasons why this stocking level was chosen.

- Only minor conflicts with other resources were identified at the proposed stocking level.

- The methodology used to determine the proposed stocking level indicates that the objectives for livestock forage could be met at this stocking level with the range improvements listed above.

- Although the current rate of 18 percent nonuse may continue into the future, the exact rate of nonuse is unpredictable. Actual use is tied to market conditions and other factors such as weather and fire. Thus, if this alternative were implemented, the initial stocking level of 49,589 AUMs may or may not be fully utilized. However, the initial stocking level of 49,589 AUMs is used for analysis of the environmental effects in the event it were fully utilized.

- The initial stocking level of 49,589 AUMs could be supported in a drought year when forage production was low.

The initial stocking level of 59,589 AUMs would occur based on monitoring data as discussed in Part I. Increases that depended on range improvements would occur only if funding for the necessary improvements was available and the projects were completed. Feasibility for project implementation would be handled on a case-by-case basis as the activity plans were developed.

Grazing preference includes lands in a transfer category. Decreases in preference resulting from land transfers would occur only as the identified tracts were transferred from federal ownership. See Appendix B, Table B-1, for detailed information on transfer category lands.

Changes in season of use would occur in some allotments where there was a conflict with other resource needs. Altered turnout dates and/or season of use may be used to improve range condition, improve vigor of perennial vegetation, and implement reductions needed to achieve management goals.

To implement this alternative, 55 allotment management plans would have to be developed (one for each allotment in the Improve category).

Wildlife

Under this alternative, wildlife habitat management would be constrained to a level compatible with the forest management goals.

A minimum of two habitat management plans (HMPs) would be developed:

Species	Location	Acreage
Elk/Bighorn	Lower 8-Mile to Eighteenmile	28,000
Antelope/Sage grouse	Leadore to Blue Dome	120,000

Under this alternative, 4,920 AUMs (cattle equivalent) of forage would be reserved for an estimated 8,437 deer, 1,181 elk, 2,600 antelope, and 136 bighorn sheep.

Approximately 3,000 acres of elk winter/spring range; about 10,000 acres of deer, antelope, and sage grouse seasonal ranges; and about 17,000 acres of nongame habitat would be improved. This would occur through joint range/wildlife HMP and allotment management plan (AMP) development by raising ecological condition from fair to good.

An additional 3,700 acres of elk and bighorn seasonal ranges would be enhanced through prescribed burning to increase grass/forb production and quality. Forage quality and quantity for waterfowl would be improved on about 5 acres of riverine habitat through prescribed burning. Acreage identified for burning assumes adequate fuel loading and the presence of desirable fire-enhanced species.

A more consistent water supply would be provided on 40,500 acres of antelope, sage grouse, and nongame habitat by installing nine 500-gallon guzzlers. One mile of pipeline would be built to augment the water supply to three of the guzzlers. Approximately 1 1/2 miles of fencing would be used to construct exclosures around the guzzlers.

Habitat values of about seven small isolated seeps and wet meadows created by overflow of livestock water developments would be preserved and enhanced. About one-half to 1 mile of fencing would be required.

Big game movement and safety would be enhanced through modification of about 101 miles of fence in accord with Lemhi Resource Area fencing policy.

The future integrity of selected crucial habitats (elk breeding area in McDevitt Creek; deer, antelope, and sage grouse winter range; antelope migration corridor near Center Ridge; and others) would be enhanced through acquisition of about 1,160 acres of state land and 480 acres of private land.

The integrity and availability of 29,540 acres of crucial habitat of raptors, waterfowl, and elk would be preserved and enhanced through adoption of no-surface-occupancy restrictions on mineral leasing, exploration, and development. Availability of an additional 269,460 acres of habitat would be assured through seasonal restrictions on mineral activity.

Habitat quality of about 8,800 acres of elk/bighorn winter range would be preserved and enhanced through restrictions on livestock use. Included within this acreage are 591 acres subject to timber management and harvest restrictions.

Bighorn sheep health protection would be greatly enhanced by shifting all domestic sheep use to cattle use from Little Eightmile to Eighteenmile.

Watershed and Fisheries

Management actions would be identical to those described for Alternative D.

Recreation

This alternative would enhance recreation management by defining special recreation management area (SRMA) boundaries, emphasizing visual resource management in two of the SRMAs, and protecting recreation sites with mineral entry withdrawals. The three SRMAs currently designated would remain and a recreation area management plan (RAMP) would be written for each. (The Salmon River RAMP is currently being written.)

The Salmon River SRMA would include 4,405 acres. River access recreation sites would be constructed at Camp Creek and Elevenmile. The river would be managed as if it were a "recreational" wild and scenic river, but Congressional direction for a formal Wild and Scenic River study is not anticipated. Visual resources would be managed under Class I guidelines.

The Continental Divide National Scenic Trail SRMA would include 4,600 acres that would result from establishing a trail corridor one-quarter mile on either side of the proposed treadway. Visual resources within the corridor would be managed under Class III and IV guidelines.

The Lewis and Clark National Historic Trail SRMA would include 2,810 acres that would result from establishing a corridor adequate to maintain a continuous treadway. Visual resources within the corridor would be managed under Class II guidelines. Withdrawal of 2,810 acres from mineral entry would adequately protect the trail route from surface disturbance. Recreation opportunities would exist on either side of the proposed treadway. Visual resources within the corridor would be managed under Class III and IV guidelines.

Recreation opportunities would be provided in the roaded natural (450,291 acres) and rural (9,275 acres) experience settings. Lands inventoried in the primitive, semi-primitive nonmotorized, and semi-primitive motorized recreation opportunity spectrum (ROS) classes would be allowed to become roaded if mineral exploration and development or timber harvest activities occurred.

Lands open to unrestricted vehicle use would total 443,336 acres (96.5 percent). Recreational off-road vehicle use would continue to be limited during winter months on 16,230 acres (3.5 percent of the RMP area) of big game winter range.

For visual resource management, the following designations would be made: Class I, 4,405 acres; Class II, 18,530 acres; Class III, 182,515 acres; and Class IV, 254,116 acres.

Existing and planned investments in developed recreation sites would be protected by withdrawal of 186.75 acres from mineral entry. However, revocation of existing withdrawals on 640.14 acres no longer required for recreation program management would be recommended. An additional 800 acres at Sharkey Hot Springs would be closed to geothermal leasing, subject to valid existing rights.

Wilderness

This alternative recommends the 24,922 acres in the Eighteenmile Wilderness Study Area (WSA) for nonwilderness uses. Road construction for mineral exploration and development and timber harvesting would be allowed. Until Congress made a final wilderness decision, the WSA would be managed under BLM's Interim Management Policy for Lands Under Wilderness Review.

Fire

Full suppression fire management guidelines would be followed on 459,566 acres. Only recreation sites or sites that have potential for site development would be considered for suppression restriction until the new normal year fire plan was done. About 22,075 acres would undergo prescribed burning for vegetation manipulation. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural Resources

Cultural resources would be managed so that representative samples of the full range of scientific and socio-cultural values were maintained consistent with state and federal laws.

Six areas would be protected through special management:

1. Chief Tendoy Cemetery
2. Lewis and Clark Trail
3. Salmon River Corridor
4. Indian Area A
5. Indian Area B
6. Indian Head Site Area

Cultural resource management plans would be written for all of these. These plans would be implemented upon completion.

ALTERNATIVE F (PREFERRED ALTERNATIVE)

Goal: This alternative represents a mix of resource uses that takes a balanced approach to public land management. Production and use of commodity resources and commercial use authorizations would occur, but fragile resources, wildlife habitat, cultural values, and other nonconsumptive resource uses would be protected. It would require funding at approximately the present level.

Part of the Eighteenmile WSA would be recommended as suitable for wilderness designation.

Map 10 illustrates the lands selected for transfer (5,835 acres) and shows the multiple use lands (453,731 acres) under Alternative F.

Lands

Under this alternative, BLM would consider 4,495 acres for transfer from federal ownership through public sales or exchanges. This acreage would consist of small isolated parcels of public land and parcels with unauthorized private uses (primarily agricultural uses). Public access to these is limited in most cases and the parcels provide little benefit to the general public. Included in this total is 200 acres that would be transferred by exchange only. these parcels are small, isolated and contain wildlife and riparian habitat. A land exchange would only be considered if the private lands, to be acquired, also contain wildlife and riparian habitat and if the parcels are adjacent to other public land. This would increase management efficiency without losing any habitat. Detailed examinations would be conducted on these parcels prior to any transfer action.

BLM would also consider 1,340 acres for transfer under the Desert Land Act, as amended. These parcels contain Class III or better soils and may be suitable for agricultural development. Detailed examinations would also be conducted on these parcels prior to any transfer actions.

A total of 453,731 acres of public land would be retained. BLM would attempt to acquire 640 acres of private land and 4,960 acres of state land. The classification for retention of 422,578 acres under the Classification and Multiple Use Act would be cancelled because it would be redundant.

Right-of-way development could occur with no restrictions on 440,365 acres. Restrictions would be imposed on 4,405 acres. A total of 14,796 acres would be closed to right-of-way development.

Energy and Minerals

Under this alternative, the objective would be to manage 475,593 acres of federal mineral estate in a manner that would allow exploration and development while minimizing unnecessary impacts to other resources. To accomplish this objective, a total of 161,909 acres would be open for oil and gas leasing with standard stipulations; another 221,519 acres would be open with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 77,369 acres would be leased with a "no surface occupancy" restriction for the protection of recreation, watershed, and cultural resource values. A total of 14,796 acres would be closed to oil and gas leasing by the recommendation for wilderness designation for a portion of the Eighteenmile Wilderness Study Area (WSA).

About 161,214 acres would be available for geothermal leasing with standard stipulations; 221,519 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 76,569 acres would be available for leasing only with a "no surface occupancy" stipulation to protect recreation, watershed, and cultural resource values. A total of 15,596 acres would be closed to geothermal leasing as part of the recommendation for wilderness designation of a portion of the Eighteenmile WSA and for recreational development.

Solid mineral leasing would be permitted on 160,848 acres under standard stipulations. About 221,885 acres would be available for leasing with seasonal occupancy restrictions, primarily for the protection of wildlife values. A total of 92,165 acres would be closed to solid mineral leasing for the protection of recreation, watershed, and cultural resource values and by the recommendation for wilderness designation of a portion of the Eighteenmile WSA.

A total of 455,434 acres would be open for the location of mining claims and managed under the surface management regulations. About 18,821 acres would be withdrawn from mineral entry by the recommendation for wilderness designation on a portion of the Eighteenmile WSA and for the protection of recreation developments and cultural resources. An additional 540 acres would be open to location but subject to superior rights established by community pit and mineral material site designations.

Mineral material disposals would be permitted from 382,888 acres of the resource area. However, 92,010 acres would be closed to mineral material disposals by the recommendation for wilderness designation of a portion of the Eighteenmile WSA and for the protection of recreation, watershed, and cultural resource values.

Forest Management

In this alternative, 28,865 acres of available commercial forest land would be intensively managed for the sustained yield production of timber. Of this acreage, 1,179 acres would receive restricted management to reduce the impacts to critical elk winter range. These restrictions would be designed primarily to maintain adequate hiding and thermal cover for wintering elk herds. Such restrictions would most commonly be applied to the layout and design of timber sales. Examples of methods which would be employed in the long-term management of these restricted stands include extended rotations, minimal clearcutting, and additional reserve areas.

An additional 581 acres of available commercial forest land would also be restricted to ensure that management activities along the Continental Divide National Scenic Trail remained visually subordinate to the characteristic landscape. Stands affected by these restrictions lie within a 1/4-mile-wide corridor west of the Continental Divide ridge. The restricted stands within this corridor would be subject to specific sale layout and harvest practices such as piling and burning logging slash, shaping clearcuts to blend with the surrounding landscape, and minimizing construction of haul roads and skid trails.

Three set-asides totaling 1,444 acres are included in this alternative and would reduce the timber production base accordingly. Approximately 1,354 acres of commercial forest land would be set aside to protect wilderness values within the portion of the Eighteenmile Wilderness Study Area (WSA) recommended suitable for wilderness designation. Another 15 acres would be withdrawn to protect the Williams Lake Recreation Site. In order to maintain the visual qualities of the existing landscape along the Continental Divide Trail, 75 acres would be set aside. Stands affected by this set-aside are within a corridor running 100 feet to each side of the trail's established treadway. No timber harvesting would be scheduled in any of these set-aside stands.

Under this alternative, 3,131 acres of woodland would be closed to woodland product sales (firewood cutting, Christmas tree sales, etc.). These closures would be aimed at preservation of the visual qualities of the existing landscape in select areas with high recreation and wilderness values. Acreages for these areas include 622 acres within the 1/4-mile-wide Continental Divide Trail corridor and 2,509 acres within the portion of the Eighteenmile WSA recommended suitable for wilderness designation.

The adoption of the Timber Production Capability Classifications would withdraw 6,046 acres of nonsuitable commercial forest land from the timber production base.

All available commercial forest land within the Eighteenmile WSA would be managed in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review until a final decision was issued by Congress on wilderness designation.

Limited forest management practices would be applied to 23,138 acres of woodland to increase the production of non-sawtimber products such as firewood and Christmas trees.

Range

The planning area would be managed to achieve a balance between all resources. Under this alternative, the objective would be to maintain or improve existing perennial forage plants, maintain or improve soil stability, and stabilize or improve areas currently in a downward trend. This alternative is designed to improve 22,940 acres of fair and poor condition range to good condition.

Range improvements would be implemented to help achieve the above objectives. Proposed improvements include 22,700 acres of brush control, 4,400 acres of seeding, 32 springs, 50 miles of pipeline, 4 reservoirs, and 63 miles of fence, for a current estimated total cost of $787,947. Burning is the preferred method of brush control and would be used where ground cover was adequate to carry fire and species composition would allow recovery of desirable vegetation.

Short-term (less than five years) reductions would be made on 63 allotments; no increases would occur. Twenty-five allotments would be unchanged. Two allotments, Dummy Creek and Big Dry Canyon, would be available for use on a temporary basis. For the management area as a whole, the initial stocking level of 43,602 AUMs would be less than the 5-year average use and below active preference. In the long-term, reductions would be made on 46 allotments and increases would occur on 6; 36 allotments would be unchanged. Dummy Creek and Big Dry Canyon would continue to be used only on a temporary basis. The long-term stocking level would be 52,632 AUMs.

Increases could occur up to full preference or beyond, depending on trend, actual use, and feasibility of range improvements. Range improvements in some allotments and existing forage production and facilities would allow for the proposed increases. The grazing preference level proposed assumes an optimistic future funding level for implementation of range improvements.

Grazing adjustments would be made over the 20-year life of the plan. These would occur only after conducting monitoring studies and coordinating with the affected users.

Those allotments that required a reduction in grazing use would be reduced over a 5-year period through the use of monitoring. See Appendix B for allotments that would receive increases and decreases.

The initial stocking level of 43,602 AUMs would be 19 percent lower than the current 5-year average actual use and 32 percent lower than the current active preference. There are several reasons why this stocking level was chosen.

- No conflicts with other resources were identified at the proposed stocking level.

- The methodology used to determine the proposed stocking level indicates that the objectives for livestock forage can be met at this stocking level with the range improvements listed above.

- Although the current rate of 18 percent nonuse may continue into the future, the exact rate of nonuse is unpredictable. Actual use is tied to market conditions and other factors such as weather and fire. Thus, if this alternative were implemented, the initial stocking level of 43,602 AUMs may or may not be fully utilized. However, the initial stocking level of 43,602 AUMs is used for analysis of the environmental effects in the event it were fully utilized.

- The initial stocking level of 43,602 AUMs could be supported in a drought year when forage production was low.

- Selected allotment management plans (AMPs) would be designed to maintain or enhance forage for wintering elk herds (8,800 acres).

- Sheep to cow conversions would be pursued and cattle to sheep changes disallowed from Little 8-Mile drainage south to Dry Canyon drainage. This strategy would be carried out to enhance bighorn sheep habitat.

- Livestock grazing would be excluded on 15.5 miles of riparian and aquatic areas.

The initial stocking rate of 43,602 AUMs would occur based on monitoring data as discussed in Part I. Increases that depended on range improvements would occur only if funding for the necessary improvements was available and the projects were completed. Feasibility for project implementation would be handled on a case-by-case basis as the activity plans were developed.

Grazing preference includes lands in a transfer category. Decreases in preference resulting from land transfers would occur only as the identified tracts were transferred from federal ownership. See Appendix B, Table B-1, for detailed information on transfer category lands.

Changes in season of use would occur in some allotments where there was a conflict with other resource needs. Altered turnout dates and/or season of use may be used to improve range condition, improve vigor of perennial vegetation, and implement reductions needed to achieve management goals.

To implement this alternative, 55 AMPs would have to be developed (one for each allotment in the Improve category).

Wildlife

This alternative is a blend of portions of the other alternatives. The primary objective would be to provide a balanced and reasonable approach to wildlife habitat management for the resource area. Alternative portions were selected based on their meeting Idaho Department of Fish and Game population goals for big game; offering substantial, realistic improvement of nongame habitat; providing adequate protection for such crucial habitats as raptor nesting cliffs; and being compatible with other resource activity demands.

A minimum of six habitat management plans (HMPs) would be developed:

Species	Location	Acreage
Elk/Deer	Haynes Cr. to Hayden Cr.	54,000
Elk/Deer	Kenney Cr. to Peterson Cr.	58,000
Elk/Bighorn	Little Eightmile to Eighteenmile	28,000
Antelope/Sage grouse	Leadore to Blue Dome	120,000
Nongame/Waterfowl	Morgan Bar	16
Nongame/Waterfowl	Tower Creek Flats	40

Under this alternative, 6,749 AUMs (cattle equivalent) of forage would be reserved to support projected populations of 10,113 deer, 2,194 elk, 2,950 antelope, and 200 bighorns.

Approximately 4,000 acres of elk winter/spring range; about 17,000 acres of deer, antelope, and sage grouse seasonal ranges; and about 22,000 acres of nongame habitat would be improved. This would occur through joint AMP and HMP development by raising ecological range condition from fair to good.

An additional 7,320 acres of seasonal elk and bighorn sheep ranges would be enhanced through prescribed burning to increase grass/forb production and quality. Forage quality and quantity for waterfowl would be improved on about 40 acres of riverine habitat through prescribed burning. Acreage identified for burning assumes adequate fuel loadings and the presence of desirable fire-enhanced species.

A more consistent water supply would be provided on 81,000 acres of antelope, sage grouse, and nongame habitat in the Gilmore and Muddy Creek areas by installing eighteen 500-gallon guzzlers. Six miles of pipeline would be built from existing livestock water developments to augment the water supply to seven of the guzzlers. Approximately 2 1/2 miles of fencing would be used to construct exclosures around the guzzlers.

Habitat values of about 30 small isolated seeps and wet meadows created by overflow of livestock water developments would be preserved and enhanced. About 3 to 4 miles of fencing would be required.

Big game movement and safety would be enhanced through modification of about 154 miles of fence in accord with Lemhi Resource Area fencing policy. The future integrity of selected crucial habitats (the elk breeding area in McDevitt Creek, antelope migration corridor near Center Ridge, and others) would be secured through acquisition of about 4,960 acres of state land and 640 acres of private land.

The integrity and availability of 69,057 acres of crucial habitat of raptors, waterfowl, elk, etc. would be enhanced through adoption of no-surface-occupancy restrictions on mineral leasing, exploration, and development. Availability of an additional 223,400 acres of habitat would be assured through seasonal restrictions on mineral activity.

Habitat quality of about 8,800 acres of crucial elk and bighorn habitat would be enhanced through restrictions on livestock use. Included within this average are 1,179 acres subject to timber management and harvest restrictions.

Bighorn sheep health protection would be greatly enhanced by shifting all domestic sheep use to cattle use from Little Eightmile to Eighteenmile.

Watershed and Fisheries

Riparian areas along 15.5 miles of perennial streams would be fenced to exclude livestock, as would 100 spring developments. The areas include Cow Creek (1.5 miles), McDevitt Creek (3.0 miles), Pattee Creek (3.0

miles), Sevenmile Creek (2.0 miles), Muddy Creek (4.0 miles), and the Beer Can Flats area of Freeman Creek (2.0 miles).

Watershed activity plans would be written for the Sevenmile-Hot Springs Creek, McDevitt-Muddy Creek, Warm Springs-Pattee Creek, and Freeman-Geertson Creek areas. These plans would use the final RMP as a starting point to propose specific actions for these four areas to improve watershed conditions.

Under this alternative, 94.7 miles of stream would be maintained in their present condition and 3.0 miles of stream (McDevitt Creek) would be improved from fair condition to excellent condition. Improvement of 2.0 miles of tributaries to the Class 1 rated Salmon River (Sevenmile Creek) would be sought under this alternative. Surface-disturbing activities adversely affecting Class III streams would be avoided, if practical.

New timber harvest roads would be closed at the completion of timber sales except for use in timber and fire management. The Henry Creek road would be closed except for fire and range management.

Minimum streamflows on Big Timber Creek would be applied for as identified in the Instream Flow Study conducted by the Idaho Fish and Game Department for BLM.

Recreation

This alternative would recognize recreation as the principal use of the lands in the three special recreation management areas (SRMAs). Additional mineral withdrawals, restrictions on some nonrecreational uses, and restrictive visual management practices would be implemented. A recreation area management plan (RAMP) would be written for each SRMA. (The Salmon River RAMP is currently being written.)

The Salmon River SRMA would include 4,405 acres. River access recreation sites would be constructed at Camp Creek and Elevenmile. This alternative would manage the river as if it were a "recreational" wild and scenic river; however, Congressional direction for a formal Wild and Scenic River study is not anticipated. The river would be managed as a Class II visual resource management area.

The Continental Divide National Scenic Trail SRMA would include 4,600 acres that would result from establishing a trail corridor one-quarter mile on either side of the proposed treadway. Visual resources within the corridor would be managed under Class II guidelines within a 200-foot-wide corridor along the treadway and under Class III guidelines within the remainder of the corridor. This alternative would withdraw 75 acres of commercial forest land from the timber production base and from all woodland product sales. Restricted management activities on an additional 518 acres are proposed in order to maintain existing visual qualities. Restrictions may be applied to size of harvest units, siting of roads, disposal of slash, and percentage of cover reduction.

The Lewis and Clark National Historic Trail SRMA would include 9,080 acres that would result from establishing a corridor wide enough to retain the natural aspects of the historic trail route. Visual resources within the corridor would be managed under Class II guidelines. Withdrawal of 1,820 acres from mineral entry would protect the trail route from disturbance. A no-surface-occupancy stipulation would also be added to all leases within these 1,820 acres.

Recreation opportunities in the recreation opportunity spectrum (ROS) classes would remain similar to the existing situation. Lands would be designated in the primitive (.8 percent), semi-primitive nonmotorized (2.4 percent), semi-primitive motorized (4.2 percent), roaded natural (90.6 percent), and rural (2.0 percent) opportunity classes.

Lands open to unrestricted vehicle use would total 428,540 acres (93 percent). Recreational ORV use would continue to be limited during winter months on 16,230 acres of big game winter range. A year-round closure to all vehicle use would be placed on 14,796 acres because of a wilderness designation. These acreage figures represent 3.5 and 3.2 percent of the RMP area, respectively.

For visual resources management, the following designations would be made: Class I, 14,796 acres; Class II, 29,280 acres; Class III, 184,205 acres; and Class IV, 231,285 acres. No interim classes would remain.

Existing and planned investments in developed recreation sites would be protected by withdrawal of 186.75 acres from mineral entry. However, revocation of existing withdrawals on 640.14 acres no longer required for recreation program management would be recommended. An additional 800 acres at Sharkey Hot Springs would be closed to geothermal leasing, subject to valid existing rights. The setting aside of 15 acres of productive timber in the existing Williams Lake Campground would be necessary.

Wilderness

This alternative recommends 14,796 acres for wilderness designation and 10,126 acres for nonwilderness uses. Following designation, a wilderness management plan would be prepared. Approximately 1,354 acres of commercial forest land would be set aside from the timber production base. The 14,796 acres would be withdrawn from mineral entry and leasing and closed to all vehicle use.

If Congress did not accept the recommendation, the 14,796 acres would be managed to maintain the existing recreation opportunity spectrum classes. Approximately 1,257 acres would be set aside from the timber production base. A vehicle closure would remain on 12,614 acres.

Fire

Full suppression fire management guidelines would be followed on 444,770 acres. Under this alternative, 14,796 acres would be managed under the suppression restriction to maintain wilderness quality. All developed recreation sites and potential development sites would be under suppression restrictions, i.e., no retardant, no heavy equipment use, and no fire line explosives. Prescribed burns for vegetation manipulation would be conducted on 30,078 acres. Heavy fuel loading caused by logging debris and dead trees would be reduced on 10,000 acres to decrease the likelihood of having a disastrous fire.

Cultural Resources

BLM would manage cultural resources so that representative samples of the full range of scientific and socio-cultural values were maintained consistent with state and federal laws.

Five areas would be protected through special management:

1. Chief Tendoy Cemetery
2. Lewis and Clark Trail
3. Salmon River Corridor
4. Indian Area A
5. Indian Area B

Cultural resource management plans would be written and implemented for all five areas.

ALTERNATIVE G

This alternative is identical to Alternative F, with one exception: it provides for Congress not designating the 14,796 acres recommended as suitable for wilderness designation. Management actions would be identical to those proposed under Alternative F for lands, range, wildlife, watershed and fisheries, and cultural resources.

Energy and Minerals

Under this alternative, the objective would be to manage 475,593 acres of federal mineral estate in a manner that would allow exploration and development while minimizing unnecessary impacts to other resources. To accomplish this objective, a total of 163,723 acres would be open for oil and gas leasing with standard stipulations; another 221,905 acres would be open for leasing with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 89,965 acres would be leased only with the "no surface occupancy" restriction for the protection of recreation, watershed, and cultural resource values. There would be no lands closed to oil and gas leasing.

About 163,028 acres would be available for geothermal leasing with standard stipulations; 221,905 acres would be available with seasonal occupancy restrictions, primarily for the protection of wildlife values; and about 89,165 acres would be available only with a "no surface occupancy" restriction for the protection of recreation, watershed, and cultural resource values. An additional 800 acres would be closed to geothermal leasing for recreational development.

Solid mineral leasing would be permitted on 163,028 acres with standard stipulations; about 221,905 acres would be available for leasing with seasonal occupancy restrictions, primarily for the protection of wildlife values. A total of 89,965 acres would be closed to solid mineral leasing for the protection of recreation, watershed, and cultural resource values.

A total of 470,233 acres would be open to the location of mining claims and managed under the surface management regulations. About 4,125 acres would be closed to mineral entry for the protection of recreation developments and cultural resources. An additional 540 acres would be open to location but subject to superior rights established by community pit and mineral material site designations.

Mineral material disposals would be allowed from 385,068 acres of the resource area. However, 89,830 acres would be closed to mineral material disposals for the protection of recreation, watershed, and cultural resource values.

Forest Management

In this alternative, 28,962 acres of available commercial forest land would be intensively managed for the sustained yield production of timber. Of this acreage, 1,179 acres would receive restricted management to reduce the impacts to critical elk winter range. These restrictions would be designed primarily to maintain adequate hiding and thermal cover for wintering elk herds. Such restrictions would most commonly be applied to the layout and design of timber sales. Examples of methods which would be employed in the long-term management of these restricted stands include extended rotations, minimal clearcutting, and additional reserve areas.

An additional 581 acres of available commercial forest land would also be restricted to ensure that management activities along the Continental Divide National Scenic Trail remained visually subordinate to the characteristic landscape. Stands affected by these restrictions lie within a 1/4-mile-wide corridor west of the Continental Divide ridge. The restricted stands within this corridor would be subject to specific sale layout and harvest practices such as piling and burning logging slash, shaping clearcuts to blend with the surrounding landscape, and minimizing construction of haul roads and skid trails.

Three set-asides totaling 1,347 acres are included in this alternative and would reduce the timber production base accordingly. Approximately 1,257 acres of commercial forest land would be set aside to maintain primitive and semi-primitive nonmotorized recreation opportunities in the Eighteen-mile WSA. Another 15 acres would be set aside to protect the Williams Lake Recreation Site. In order to maintain the visual qualities of the existing landscape along the Continental Divide Trail, 75 acres would be set aside. Stands affected by this withdrawal are within a corridor running 100 feet to each side of the trail's established treadway. No timber harvesting would be scheduled in any of these set-aside stands.

Under this alternative, 2,933 acres of woodland would be closed to woodland product sales (firewood cutting, Christmas tree sales, etc.). These closures would be aimed at preservation of the visual qualities of the existing landscape in select areas with high recreation and wilderness values. Acreages for these areas include 622 acres within the 1/4-mile-wide Continental Divide Trail corridor and 2,311 acres within the primitive and semi-primitive nonmotorized recreation opportunity spectrum classes in the Eighteenmile Wilderness Study Area (WSA).

The adoption of the Timber Production Capability Classifications would withdraw 6,046 acres of nonsuitable commercial forest land from the timber production base.

All available commercial forest land within the Eighteenmile WSA would be managed in accordance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review until a final decision was issued by Congress on wilderness designation.

Limited forest management practices would be applied to 23,336 acres of woodland to increase the production of non-sawtimber products such as firewood and Christmas trees.

Recreation

Recreation management would be similar to that described for Alternative F. However, the 14,796-acre area within the Eighteenmile WSA recommended for wilderness designation would be managed to retain the existing primitive recreation opportunities on 3,840 acres and semi-primitive nonmotorized opportunities on 8,774 acres, should Congress not approve wilderness designation. The remaining 2,182 acres would be managed for semi-primitive motorized uses and opened to off-road vehicle use.

An additional 13,796 acres would be managed as a visual resource Class IV area, which is the inventoried and existing situation. Along the Continental Divide National Scenic Trail, 1,000 acres would be managed as a Class II area.

Wilderness

As previously noted, this alternative provides for Congress not designating 14,796 acres in the Eighteenmile Wilderness Study Area as wilderness.

Fire

This alternative is similar to Alternative F. However, a total of 14,796 acres in the Eighteenmile WSA would receive full suppression fire management, with prescribed burns on 500 acres. Thus, a total of 459,566 acres would be under full suppression guidelines and 30,578 acres would be proposed for prescribed burning.

COMPARATIVE SUMMARY OF IMPACTS

The various alternatives discussed in this chapter would have differing impacts to the environment. A summary comparison of these impacts is presented in Table 2-1.

TABLE 2-1
COMPARATIVE IMPACT SUMMARY

Environmental Topics	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
IMPACTS TO ENERGY AND MINERALS AVAILABILITY							
Oil and gas leasing	Insignificant impact; 0 acres closed; some restrictions	Slightly adverse; 14,796 acres closed; more restrictions	Moderately adverse; 29,352 acres closed; Most restrictions	Slightly beneficial; 0 acres closed; least restrictions	Slightly adverse; 0 acres closed; more restrictions	Slightly adverse; 14,796 acres closed; more restrictions	Slightly adverse; 0 acres closed; More restrictions
Geothermal leasing	Insignificant impact; 0 acres closed; some restrictions	Slightly adverse; 15,596 acres closed; More restrictions	Moderately adverse; 30,152 acres closed; Most restrictions	Slightly beneficial; 0 acres closed; least restrictions	Slightly adverse; 800 acres closed; more restrictions	Slightly adverse; 15,596 acres closed; more restrictions	Slightly adverse; 800 acres closed;; more restrictions
Nonenergy leasing	Insignificant impact; 31,767 acres closed	Slightly adverse (moderately adverse for phosphate); 67,373 acres closed	Moderately adverse; 120,878 acres closed	Slightly beneficial; 6,405 acres closed	Slightly adverse (moderately adverse for phosphate); 36,469 acres closed	Slightly adverse (moderately adverse for phosphate); 92,165 acres closed	Slightly adverse (moderately adverse for phosphate); 89,965 acres closed
Locatable minerals	Insignificant impact; 2,346 acres closed	Slightly adverse; 18,789 acres closed	Slightly adverse (moderately adverse for Salmon River corridor and WSA); 35,688 acres closed	Slightly beneficial; 1,564 acres closed	Slightly adverse; 4,970 acres closed	Slightly adverse (moderately adverse for Salmon River corridor and WSA); 18,921 acres closed	Slightly adverse; 4,125 acres closed
Salable minerals	Insignificant impact; 27,267 acres closed	Slightly adverse; 66,658 acres closed	Slightly adverse; 120,163 acres closed	Slightly beneficial; 1,975 acres closed	Slightly adverse (moderately adverse for Salmon River corridor); 35,846 acres closed	Slightly adverse (moderately adverse for Salmon River corridor); 92,010 acres closed	Slightly adverse (moderately adverse for Salmon River corridor); 89,830 acres closed
IMPACTS TO TIMBER YIELD AND AVAILABILITY	No adverse impact; no set-asides, closures, or restrictions; lost yield: none	Moderately adverse; set-asides (8.5%), closures (21%), and restrictions (8%); lost yield: 245 MBF*/year	Significantly adverse; set-asides (10%), closures (26%), and restrictions (22%); lost yield: 380 MBF/year	Significantly adverse; set-asides (.05%), and restrictions (7%); no closures; lost yield: 32 MBF/year	No adverse impact; no set-asides, closures; or restrictions; lost yield: none	Slightly adverse; set-asides (5%), closures (12%), and restrictions (6%); lost yield: 140 MBF/year	Slightly adverse; set-asides (4%), closures (11%), and restrictions (6%); lost yield: 132 MBF/year
IMPACTS TO LIVESTOCK GRAZING	Insignificant impact; short-term change**: none; long-term change**: +2%	Highly beneficial; short-term change: +16%; long-term change: +32%	Significantly adverse; short-term change: -44%; long-term change: -31%	Significantly beneficial; short-term change: +2%; long-term change: +10%	Significantly beneficial (long-term); short-term change: -7%; long-term change; +4%	Insignificant long-term impact; short-term change: -19%; long-term change: -2%	Insignificant long-term impact; short-term change: -19%; long-term change: -2%
IMPACTS TO RANGE VEGETATION	Significantly adverse; no change in unsatisfactory ecological condition (28% fair)	Significantly adverse; increase in unsatisfactory ecological condition (36% fair)	Significantly beneficial; decrease in unsatisfactory ecological condition (16% fair)	Moderately beneficial; decrease in unsatisfactory ecological condition (19% fair)	Moderately beneficial; decrease in unsatisfactory ecological condition (21% fair)	Moderately beneficial; decrease in unsatisfactory ecological condition (20% fair)	Moderately beneficial; decrease in unsatisfactory ecological condition (20% fair)

*Thousand board feet

**Relative to 5-year average use

TABLE 2-1 (Continued)
COMPARATIVE IMPACT SUMMARY

Environmental Topics	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
IMPACTS TO CRUCIAL WILDLIFE HABITATS	Insignificant impacts; no major habitat or population changes	Significantly adverse; habitat decline; significant population declines (deer, -35%; elk, -55%; antelope, -22%; and sage grouse, -25%)	Significantly beneficial; habitat improvement; significant population increases (deer, +40%; elk, +44%; bighorn, +1,739%; and sage grouse, +20%); no change for antelope	Significantly adverse; habitat decline; significant population declines (deer, -21%; elk, -56%; antelope, -37%; bighorn, -100%; and sage grouse, -25%)	Moderately beneficial except for elk; habitat improvement; population increases for deer (+13%) and bighorn (+590); population decrease for elk (-40%); no change for antelope or sage grouse	Moderately beneficial; habitat improvement, population increases (deer, +35%; elk, +11%; antelope, +5%; bighorn, +869%; and sage grouse, +15%)	Moderately beneficial; habitat improvement, population increases (deer, +35%; elk, +11%; antelope, +5%; bighorn, +869%; and sage grouse, +15%)
IMPACTS TO WATER QUALITY, WATERSHED, AND SOILS	Slight decline due to timber harvesting	Overall decline due to timber harvesting and heavy livestock use	Slight improvement because of restricted livestock grazing	Overall decline due to timber harvesting and livestock grazing	Overall decline due to timber harvesting and livestock grazing	Slight decline due to timber harvesting	Slight decline due to timber harvesting
IMPACTS TO RIPARIAN HABITAT	Continued decline due to livestock grazing	Severe degradation due to increased livestock use	Substantial improvement because of restricted livestock grazing	Gradual decline due to increased livestock use	Gradual decline due to increased livestock use	Slight improvement because of grazing restrictions	slight improvement because of grazing restrictions
IMPACTS TO FISHERIES HABITAT	Continued decline (good, 38.7 miles; fair good, 20.8 miles, fair, 38.2 miles; poor, none)	Serious decline (good, none; fair good, 38.7 miles; fair, 20.8 miles; poor, 38.2 miles)	Significant improvement (good, 43.7 miles; fair good, 20.5 miles; fair, 33.5 miles; poor, none)	Continued decline (good, 38.7 miles; fair good, 20.8 miles; fair, 38.2 miles; poor, none)	Continued decline (good, 38.7 miles; fair good, 20.8 miles; fair, 38.2 miles; poor, none)	Slight improvement (good, 41.7 miles; fair good, 20.8 miles; fair, 35.2 miles; poor, none)	Slight improvement (good, 41.7 miles; fair good, 20.8 miles; fair, 35.2 miles; poor, none)
IMPACTS TO RECREATION USES AND VISUAL QUALITY							
Off-road vehicle designations	Existing use unchanged, no displacement of users	Insignificant, only 15 user days displaced	Insignificant, only 25 user days displaced	Existing use unchanged, removal of restrictions would have insignificant effect	Existing use unchanged, removal of restrictions would have insignificant effect	Insignificant, only 15 user days displaced	Existing use unchanged, no displacement of users
Recreation opportunity spectrum changes***	No change	Insignificant; shift of 2,182 acres from SPM to SPNM	Slightly significant; shift of 8,282 acres from SPM to SPNM	Significant; shift of 3,840 acres P, 12,800 acres SPN and 17,280 acres SPM to RN	Significant; shift of 3,840 acres P, 12,800 acres SPN and 17,280 acres SPM to RN	Insignificant, shift of 1,844 acres from SPNM to SPM	Limited significance; shift of 4,026 acres from SPNM to SPM, but area shifted not readily usable by off-road vehicles

***P = Primitive, SPNM = Semi-primitive nonmotorized, SPM = semi-primitive motorized, and RN = roaded natural

TABLE 2-1 (Concluded)
COMPARATIVE IMPACT SUMMARY

Environmental Topics	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
Developed recreation sites	Moderately adverse; lack of response to identified need for camping and picnicking sites	Significantly beneficial; 2 additional sites on heavily used Salmon River corridor	Significantly beneficial; 2 additional sites on heavily used Salmon River corridor	Moderately adverse; lack of response to identified need for camping and picnicking sites	Significantly beneficial; 2 additional sites on heavily used Salmon River corridor	Significantly beneficial; 2 additional sites on heavily used Salmon River corridor	Significantly beneficial; 2 additional sites on heavily used Salmon River corridor
IMPACTS TO WILDERNESS VALUES	Adversely effected on 2,470 acres; subject to loss on 22,452 acres	Retained on 14,796 acres; adversely affected on 1,200 acres; subject to loss on 8,926 acres	Retained on 24,922 acres (100% of WSA)	Adversely effected on 2,470 acres; subject to loss on 22,452 acres	Adversely affected on 14,753 acres; subject to loss on 7,656 acres	Retained on 14,796 acres; adversely affected on 2,470 acres; subject to loss on 7,656 acres	Adversely affected on 2,470 acres; subject to loss on 22,452 acres
IMPACTS TO CULTURAL RESOURCES	Continued downward trend; 1 site protected	Significant increase in impacts from dispersed activities; 5 sites protected	Significant decrease in impacts from dispersed activities; 7 sites protected	Significant increase in impacts; decrease in protective withdrawals; 3 sites protected	Significant increase in impacts from dispersed activities and land transfers; 6 sites protected	Overall slight decrease in impacts; significant decrease in mineral development impacts; 5 sites protected	Overall slight decrease in impacts; significant decrease in mineral development impacts; 5 sites protected
IMPACTS TO ECONOMIC FACTORS	Minor impacts to income and employment	Minor impacts to income and employment	Minor impacts to income and employment	Minor impacts to income and employment	Minor impacts to income and employment	Minor impacts to income and employment	Minor impacts to income and employment

CHAPTER 3

AFFECTED ENVIRONMENT

INTRODUCTION

This chapter describes the Lemhi Resource Area. It emphasizes resources and land uses that are addressed by the planning issues or that would be affected by the proposed alternatives.

The information presented in this chapter is summarized from more detailed information available in the Lemhi Resource Area office and elsewhere.

LANDS

The Lemhi planning area has a total of 459,566 acres of public land administered by BLM. The land uses on the public land are as varied as the resources it contains. Public lands provide areas for livestock grazing, wildlife habitat, recreational uses (off-road vehicle use, camping, hunting, fishing, skiing, etc.), irrigation facilities (ditches, canals, reservoirs, and pipelines), access roads, and other uses.

Land ownership patterns in the planning area have been dictated primarily by the topography. Most of the private land lies close to Salmon and along the numerous creeks and rivers. Lands in the Lemhi River Valley and along the Salmon River provide the more fertile and level agricultural lands. These private lands were originally obtained through agricultural entries such as the Homestead Act, Stock Raising Homestead Act, Cash Entries, Desert Land Entries, and public sales, and through mineral entry patents.

There is a total of 428,760 acres of public land under some form of withdrawal or classification. Withdrawals include power site reserves, power projects, public water reserves, administrative sites (U.S. Forest Service), recreation/camp sites, and one Indian cemetery. Other types of withdrawals or de facto withdrawals include land use classifications for recreation and public purposes. These withdrawn lands receive varying degrees of management, depending on the land uses and type of withdrawal.

An existing multiple use classification covers 422,578 acres (93.2 percent) of the public land within the planning area. This classification means that these lands cannot be appropriated under the following land laws: Homestead Entry, Indian Allotment, Desert Land Entry, and public sale.

There are currently 565 acres included in Desert Land Entry applications. The suitability of soils, availability of water, and economic factors are considered in processing these applications. Public interest in this program is low because of the existing multiple use classification, marginal soils, lack of water, high development costs, and low crop prices.

Land Use Authorizations

Land use authorizations under the lands and reality program include a variety of purposes, some short term and others long term. Short-term uses consist primarily of permits for agricultural and other uses involving minimal land improvements. Long-term uses include numerous rights-of-way for powerlines, telephone lines, highways, roads, ditches, canals, pipelines, and other irrigation facilities, as well as mineral materials (sand and gravel) sites.

There are no formally designated utility corridors across public lands. This is because most of the utilities serve the valley bottoms where, land is privately owned and where it is also easiest to place the utilities. De facto corridors have been established where utilities cross public land. These rights-of-way in common are used whenever possible.

Rights-of-way needs are normally expressed by private and governmental entities through the filing of an application. In addition, cooperative agreements allow uses proposed by federal government entities such as the U.S. Forest Service, which uses these agreements for its numerous road rights-of-way across BLM land. The Bureau, on its own initiative, also identifies needs for preserving access routes and protecting public improvements. Much of this demand is tied to agricultural or residential development.

Known Land Exchange, Sale, or Land Acquisition Proposals

Exchanges

All public land within the planning area is subject to exchange, provided it meets the criteria under Section 206 of the Federal Land Policy and Management Act. The public land within the transfer categories is given first consideration for disposal by exchange. However, exchange proposals are considered in retention areas when it is determined that the exchange would be of benefit to the government and in the best interest of the public. There are numerous opportunities for exchanges in the area to resolve agricultural trespass, straighten property boundaries, acquire wildlife habitat, and either acquire or dispose of isolated parcels.

Sales

Sales of public land occur within transfer categories only. The parcels must meet the disposal criteria in Section 203 of the Federal Land Policy and Management Act. Most of these parcels are small, isolated, and unmanageable.

Isolated tracts are those parcels of public land that are surrounded by private lands or are cut off from larger parcels of public land because of manmade improvements (roads, fences, canals, etc.) or natural features (rivers, canyons, etc.). In some cases, they may be an appendage of a larger block of public land that extends linearly into private land. These tracts may vary in size from less than one acre to several hundred acres.

Many of these parcels have no physical or legal public access. Others may have physical access but restricted legal access or vice versa. Because of this and their size, they do not receive as much management attention as they should. As a result, unauthorized use of these isolated parcels is common. They are often an obstacle for the surrounding private landowner(s), who have to work around the frequently undefined property boundaries of these parcels. These are the types of parcels that the public expresses the greatest amount of interest in acquiring.

These isolated parcels would often enhance a private land operation when, under private ownership, they could be put to their highest and best use. There are other times, however, when these parcels offer significant public values or resources such as riparian or wildlife habitat, cultural resource values, or watershed protection that require them to remain in public ownership.

Acquisition

Acquisition of private land is authorized under Section 205 of the Federal Land Policy and Management Act. This is accomplished primarily through land exchanges with private landowners and the state of Idaho. Acquisition of private or state land is considered only on lands that are within the retention areas and that would meet the public interest criteria in the Federal Land Policy and Management Act.

Unauthorized Use

There are numerous parcels of public land that are being used by private entities with no authorization. This use involves primarily irrigated croplands or pastures. Much of this unauthorized use has occurred unknowingly over a long period of time. In some cases, extensive development and improvement has occurred, while in others the use is very casual.

Other types of unauthorized use of public land include irrigation ditches, pipelines, sprinkler systems, hay stack yards, powerlines, telephone lines, roads, fences, and open dumping. Some of these uses can be curtailed and removed, while others may be authorized as appropriate (permit or right-of-way). Lands with unauthorized uses can also be disposed of through sale or exchange.

Agricultural

The majority of the private land holdings in the area are used for livestock operations and agricultural production. These uses involve minimal demands on public lands; demands consist primarily of use authorizations for agricultural facilities, access roads, and utilities.

Additional agricultural land could be developed by providing public land through public sales or exchanges on land already under agricultural use or through desert land entries, sales, or exchanges on unimproved or unoccupied lands. However, these disposals could only be considered on lands located within transfer categories.

Land for Local Government and Community Expansion

The greatest need for public lands by local governments is for use as mineral material sources for construction and maintenance projects and for rights-of-way, sanitary landfills, and public recreation sites. Mineral material sites can be made available through material sales and free use permits, while right-of-way grants are issued for other uses.

At present time, there are three sanitary landfill sites on public land. These are located near Tendoy, Lemhi, and Leadore. These occupy 78 acres of land and are expected to provide for future needs in these areas. Any additional landfill sites would be accommodated by a sale or exchange under provisions of Section 203 or Section 206, respectively, of the Federal Land Policy and Management Act. In the past, sanitary landfill sites have been authorized under the Recreation and Public Purposes Act. BLM will no longer lease or patent land for landfill purposes under this Act because of the liability and enforcement problems associated with hazardous waste disposal.

There does not appear to be any need for identifying community expansion areas on the public land. This is due primarily to the small, slowly growing population; the large number of subdivided private lots in the county; and the depressed housing market. Any public land added to the 8,000 to 10,000 subdivided lots located outside of Salmon would only interfere with private industry, further flood the real estate market, and lower property values.

ENERGY AND MINERALS

Geologic Setting

The Lemhi Resource Area lies within the Northern Rocky Mountain physiographic province and is generally characterized by broad valleys and steep-sided, narrow mountain ranges. Igneous, metamorphic, and sedimentary rocks are all found within the area.

The valley floors are generally covered with an unmeasured thickness of Cenozoic sediments. These are underlain by Paleozoic sediments or Tertiary volcanics, depending on the location within the resource area. Beneath these are thought to be Precambrian quartzites.

The mountain ranges generally have Paleozoic sediments along their flanks and a core of Precambrian rocks (predominantly quartzite) exposed along their crests. The structural trend is northwest to southeast as evidenced by the orientation of the range crests and valley floors. Major faults follow the range fronts and, occasionally, the crests. Secondary faulting (transverse faults) frequently occurs at right angles to the dominant trend. Thrust faulting is in evidence, especially south of Lemhi, and this follows the general northwest-southeast structural pattern. Many areas within the mountain ranges are intensely deformed by combinations of folding and faulting.

Hydrothermal fluids have used many of the fault planes as conduits, depositing minerals of economic importance. Several Tertiary intrusions occur within the resource area. Alpine glaciation has scoured much of the crestline of both the Lemhi and Beaverhead ranges.

The Federal Mineral Estate

Because the reserved mineral estate varied with different land disposal laws and the time of the patenting of the land out of federal ownership, the federal mineral estate managed by the BLM within any given area is generally different than the surface acres managed. In the Lemhi RMP area, the federal mineral estate includes nearly all of the minerals beneath the federal surface and approximately 16,000 acres beneath state and private surface. On the other hand, approximately 180 acres were reacquired by the federal government without the mineral rights. The total acreage of the federal mineral estate varies, depending on the portion of the mineral estate under discussion. The federal mineral estate of the RMP area is outlined by category in Table 3-1.

TABLE 3-1
MINERAL STATUS OF LANDS WITHIN THE RMP AREA

Lemhi RMP Area

	OIL AND GAS	COAL	GEOTHERMAL	OTHER LEASABLE	OPEN FOR LOCATION
BLM SURFACE WITH MINERAL ESTATE*	459,386	459,386	459,386	459,386	459,386
PRIVATE SURFACE/FEDERAL MINERALS	15,687	15,327	14,992	14,992	14,992
STATE SURFACE/FEDERAL MINERALS	520	520	520	520	520
NOT AVAILABLE FOR MINERAL EXPLORATION AND DEVELOPMENT	0	0	0	0	2,346
TOTAL ACRES AVAILABLE**	475,593	475,233	474,898	474,898	472,556+
TOTAL ACRES LEASED	425,947	0	3,400	0	Not applicable
TOTAL ACRES UNDER APPLICATION				4,320++	

*Figures shown do not include 180 acres of BLM surface underlain by private minerals.
**Lands within the Lemhi RMP area that are available for various kinds of mineral entry.

+Includes 590 acres open for location but subject to superior rights.
++Phosphate prospecting permit applications in the Hawley Creek area.

Leasable Minerals

Oil and Gas

The Lemhi Resource Area is within the structural belt referred to as the "Overthrust Belt", which extends from the Canadian Rockies to Mexico. Large reserves of oil and gas have been discovered along this structural feature, particularly in western Wyoming and northern Montana.

Exploration continues in many areas along the Overthrust Belt, but discoveries have been sporadic and isolated. Most of the resource evaluation reports received recently state that the resource area is "prospectively valuable" for oil and gas. At the present time, 89 percent (425,947 acres) of the resource area is leased for oil and gas. Two wildcat wells have been drilled, but both were plugged and abandoned. There is no production from the resource area. The major oil and gas activity to date has been seismic exploration.

Oil and gas leasing is presently covered under a districtwide environmental assessment completed August 31, 1981 (ID-040-1-20).

Geothermal

At the present time the only known geothermal resources within the Lemhi Resource Area are scattered, low temperature hot springs. Leasing interest is generally low and only 3,400 acres of the RMP area (less than 1 percent) have been leased around the Sharkey Hot Springs area. As yet there has been no serious exploration on these leases. Because of the generally low temperatures, the springs have little potential for power generation but may have some value for space heating or recreational use. The only use at present is recreational. The full extent or value of the resource can be determined only through diligent exploration.

Geothermal leasing is covered under a districtwide environmental assessment completed August 3, 1982 (ID-040-2-37).

Coal

The occurrence of coal within the Lemhi Resource Area has been known since shortly after the original settlement of the valley. The "coal" was mined and used locally for heating but is not being used at the present time. What is locally referred to as coal is actually lignite, which has a significantly lower heat value and higher ash content than coal. Approximately 77,000 acres of the resource area, roughly north and westward from Baker, were identified as "lands valuable for coal" on a U.S. Geological Survey map originally published in 1962 and revised in 1978 (Staatz & Hovland). At one time there were eight small coal mines in the Salmon and Baker areas, but none have operated for at least 40 years and only small amounts of lignite were ever produced. The easy availability of more efficient fuels, thinness of the deposits, occurrence of better deposits in Wyoming, and long haul distance to economical transportation systems have all combined to give the deposits around Salmon a very low commercial potential.

Phosphate

Low and medium grade phosphate rocks occur in the vicinity of Hawley Creek east of Leadore. The U.S. Geological Survey reports that there are approximately 80.4 million tons of medium grade and 308.8 million tons of low grade phosphatic rock in this area occurring within 600 feet of the surface (Oberlindacher & Hovland 1979). Because of the long distance to economic transportation and the occurrence of more accessible phosphate in other regions, it is unlikely that this deposit could be economically developed in the near future. At the present time approximately 5,600 acres of BLM managed lands are under application for a prospecting permit and the recommendation has been made to issue the permit.

Locatable Minerals

The exploration for locatable minerals was one of the primary reasons for the arrival of white men in the area. Leesburg and the surrounding gold camps were some of the earliest settlements in the region and were established to support gold mining. Lead, copper, nickel, and silver were later mined in both the Beaverhead and Lemhi ranges. Railroad service was supplied to the Lemhi valley in support of and at the expense of mining, primarily at Gilmore. Lack of freight revenue after closure of the mines was probably a major contributing factor to the termination of rail service to the area. At the present time there is no major production from the area, but there are several small mines attempting to establish economic operations.

Historically, many different mineral commodities have been produced in nearly all parts of the resource area. The major producers were at Nicolia, Gilmore, Leadore, and in the vicinity of Salmon. Many of the mines had economically workable deposits but failed because of a lack of working capital. Mills were often built before adequate financial backing was secured, frequently resulting in failure. A few of the larger mines operated through the Depression years but fell into disrepair during World War II when nonessential mines were closed.

In addition, there was a significant amount of placer mining, especially in the vicinity of Salmon. Most of this took place during the late 1800s and early 1900s. The major producers were the Bohannon Creek, Kirtly Creek, and Geertson Creek drainages. Because of the recent high gold prices there has been interest in working deposits in these as well as other areas. The generally low price of base metals has limited interest in reopening any of the lode mines at the present time.

Within the resource area, there are 24 active "notices" and 2 "plans of operation" filed under the surface management regulations. Nearly all of the notices are for assessment work to meet the requirements for holding the claims. One of the plans of operation is for a proposed large-scale gold placer, while the other is for a moderately intensive exploration plan to evaluate a low-grade lode gold deposit.

There are 501 known mineral occurrences within or adjacent to the resource area representing 30 minerals of economic importance. The minerals which have been economically mined in the past within the resource area are gold, silver, lead, copper, nickel, and gypsum. Recent exploration work has centered on thorium and gold. At the present time there are approximately 250 placer mining claims, 2,154 lode mining claims, and 25 millsite claims located on lands administered by BLM. In addition, there are an additional 317 placer, 3,900 lode, and 17 millsite claims located adjacent to BLM managed lands (generally U.S. Forest Service). These additional claims are within 2 miles of BLM lands and are important because any mining activity on them may result in roads and milling facilities on BLM lands.

Salable Minerals

The primary salable minerals within the resource area that are of importance are "shale" and sand and gravel. The "shale" is used widely as undifferential fill and as road metal, especially in the northern half of the resource area. It is not a particularly good road metal except for its abundance and easy access. It is not a shale in the geologic sense; it is a shattered welded tuff member of the Challis volcanics. At the present time there are two community pits established for this material.

South of Lemhi, alluvial fans and terraces provide gravel for fill and road surfacing. There are no community pits for this material, but there are nine Highway Department material sites and one free use permit presently active. Additionally, there are occasional, small negotiated sales for gravel to meet short-term needs for specific projects (such as oil well drilling pads).

Fill dirt is available from one community pit near Salmon. Although this material is lacking in organic material and is not a good topsoil, it does fill a need in the vicinity of Salmon.

Salable bentonite is fairly widespread in lakebed sediments from Baker north to Salmon and intermittently available from Baker south toward Leadore. There has been only one sale of bentonite in the past three years and that was near Leadore. Medium grade bentonite is available from a private pit near Haynes Creek. Additional bentonite has been sold from mining claims adjacent to the Salmon airport. The validity of these claims has not been evaluated, but it is thought that the material available on the mining claims would meet neither the chemical nor the marketability criteria should a minerals examination be conducted.

Rip-rap or larger rock is occasionally required for streambank stabilization. At the present time there is one source of rip-rap, a community pit on McDevitt Creek. This pit was opened during flooding of the Lemhi River in 1984 and has generally proven to be inferior (especially in size) to material available from a Forest Service pit located on Twelvemile Creek.

There have been occasional requests for sand but there is no good source of sand-sized material within the resource area on BLM administered lands. The need for sand has generally been met by commercial operators at Salmon who process pit run material to obtain the necessary sand.

FOREST MANAGEMENT

The Lemhi RMP area contains 36,355 acres of commercial forest land, with Douglas-fir, lodgepole pine, Englemann spruce, and subalpine fir being the major commercial species. Ponderosa pine is found in scattered stands in the northeast portion of the planning area; however, its limited occurrence makes it a minor commercial species.

The planning area also contains 20,223 acres of forest land consisting of commercial species producing less than 20 cubic feet/acre/year as well as noncommercial species. This woodland acreage is not included in the commercial forest land base and is therefore not included in allowable cut calculations. Much of this land is available for the production of woodland products such as firewood and Christmas trees.

A Timber Production Capability Classification inventory was completed in the planning area in 1984. This inventory identified 30,309 acres of commercial forest land, over 83 percent of the total commercial forest land base, as suitable for the production of forest products.

The existing level of management in the Salmon District was determined by the allowable cut calculation for the Eastern Idaho Sustained Yield Unit. This harvest level was included in the Timber Management Environmental Analysis Record for this unit and has been in effect since the beginning of fiscal year 1979. The sustained yield cut for the Salmon District is

24 million board feet (MMBF) per decade, or 2.4 MMBF per year. The projected offering of timber from the Lemhi RMP area at current funding levels will remain close to 50 percent of the district's allocated harvest level. Presently, the area offers for sale 10 to 12 MMBF per decade, with a yearly average of 1.0 to 1.2 MMBF. Since the start of the 10-year harvest period in fiscal year 1979, over 5 MMBF of timber from the planning area have been sold to local logging contractors. The anticipated supply of timber from the area will total approximately 10 MMBF by the end of the 10-year period in 1988.

The history of timber harvesting in the planning area was rather sporadic prior to 1979. Since 1952, over 18 MMBF have been logged on 4,120 acres of forest land, with over 30 miles of road constructed in the harvesting process. The demand for BLM timber within the planning area has remained at a constant level since 1979. All timber offered for sale has been purchased. A high demand exists for timber sales with winter harvest periods, but most winter sales are restricted to prevent disturbance to big game populations.

The Eighteenmile Wilderness Study Area (WSA) has deferred 2,283 acres of suitable commercial forest land from intensive management because of present WSA Interim Management Guidelines. This acreage will remain in the allowable cut base but will not be subjected to timber management activities until Congress decides whether or not to designate the WSA as wilderness.

LIVESTOCK FORAGE AND GRAZING

The Lemhi Resource Area, exclusive of the area acquired from the Ellis-Pahsimeroi Resource Area as a result of the district reorganization, contains 88 grazing allotments that are used by 121 livestock operators. All allotments are administered under Section 3 of the Taylor Grazing Act. Many of the allotments contain state or private land within the allotments, which requires the establishment of percent federal range licensing. Percent federal range varies from 14 to 100 percent, with an average of 92 percent.

Grazing permits are authorized on 454,707 acres of public land, all of which are administered as Section 3 licenses.

Within the resource area there are 63,898 adjudicated animal unit months (AUMs) on the public lands. All of the adjudicated AUMs are active preference. There are approximately 19,900 cattle, 6,345 sheep, and 120 horses that use 55,324, 7,614, and 960 AUMs, respectively, on the public lands.

There are currently seven allotments managed under allotment management plans (AMPs). Two of the allotments are under rest rotation systems and five have a deferred rotation system.

An ecological site inventory was conducted during 1981, 1982, and 1983 to determine the ecological condition of the public lands. Ecological condition compares the existing plant community on a parcel of land with the potential plant community that should be on that parcel of land, barring man's influence (USDA SCS 1976).

The potential plant community is determined by natural environmental factors such as soils, topography, and climate, all of which create an environment that is best suited for that native plant community (Stoddart, Smith, and Box 1975). It should not be assumed that good ecological condition is necessarily good condition for livestock grazing. A plant community that is altered by burning, spraying, or mechanical treatment may rate as fair in ecological condition but be in good or even excellent condition for livestock grazing. Therefore, obtaining the potential plant community is not always the management goal for an area.

The results of the ecological site inventory as it pertains to ecological condition are as follows: 2,324 acres of excellent, 267,207 acres of good, 136,914 acres of fair, 1,064 acres of poor, and 47,198 acres of unmapped condition range. There are also 4,116 acres of fenced federal range and 743 acres of land not incorporated into grazing allotments.

The unmapped class consists of talus slopes or rock outcrops with slopes in excess of 50 percent or dense timber stands that provide little forage for livestock.

An apparent trend inventory was conducted in conjunction with the ecological site inventory. Trend may be explained as the direction a plant community is heading in compared to where it is now (Stoddart, Smith, and Box 1975). For this inventory if the plant community succession is towards the potential plant community or towards management objectives for the community, then the trend is upward. Conversely if the plant community succession is away from the potential plant community or management objectives for the community, then the trend is downward. The results of the apparent trend inventory are: 27 percent upward, 59 percent static, and 13 percent downward.

Livestock grazing generally occurs between May 1 and October 30, but some early spring and late fall and winter use is also authorized. A large percentage of the operations use BLM public land for the entire grazing season; only a small percentage use U.S. Forest Service land for summer grazing and then return to public land for fall use.

The resource area has four major problems affecting range management: repetitive early grazing of spring range; overutilization of riparian zones and meadows, both wet and dry; the spread of noxious plants; and the division of old grazing units into small grazing allotments.

Early spring grazing has caused most of the low-fair and poor condition range. Most of this range in the lower precipitation zones has had its understory of preferred species --bluebunch wheatgrass and Idaho fescue— significantly reduced, while, at the higher precipitation zones, the sagebrush density is excessive (greater than 30 percent of production). Production of herbage and reproduction of the preferred species has been impaired or eliminated by turning out livestock prior to range readiness. This has been caused by the reduction in carbohydrate root reserves of these plants. In other words, the physiological requirements of the plants have not been met.

The overutilization of riparian and meadow areas by concentrations of livestock is a major distribution problem. Given the steepness of terrain in the Lemhi Resource Area, more effort (herding, salting, fencing, and grazing reduction) is necessary to ensure proper livestock distribution and use of riparian areas. In conjunction with this is the problem of livestock grazing in important wildlife habitat areas. Riparian and meadow (wet and dry) areas are often key wildlife use areas. Proper use and protection of these and other important wildlife habitat areas must be ensured to provide adequate forage, cover, and other wildlife needs to maintain wildlife populations at levels determined by BLM and the Idaho Department of Fish and Game.

Also of concern is the increasing awareness of noxious plants that has developed in recent years. With this increased awareness has come increased concern about the establishment and spread of noxious plants. Species of primary concern at the present time are leafy spurge, spotted knapwood, thistles, and larkspur.

Leafy spurge is fairly isolated in the north end of the resource area, primarily in and around the Carmen Creek, Tower Creek and Badger Springs Gulch drainages. No control has been attempted.

Spotted knapwood is rather widespread in the Lemhi Resource Area. Roadways and disturbed sites are heavily infested, providing ample seed sources for further spread and infestation of the surrounding areas. No control has been attempted.

Thistles are rather widespread throughout the area. Most prevalent is bull thistle; however, musk thistle, Canadian thistle, and common thistle are quite numerous. Because most thistles can reproduce very rapidly over a wide area, eradication is nearly impossible. Some control has been achieved with the biological agent *Rhinocyllus conicus*, or thistle weevil. In 1981 and 1982 nine releases of *R. conicus* were made in the Lemhi Resource Area. These sites have been inspected and varing degrees of success have been noted.

Larkspur is also widespread in the planning area. Low larkspurs are more prevalent; however, tall species are also present. Larkspur has accounted for a death loss of 45 cattle on one allotment over a two-year period and caused nonuse on another. The grazing of low larkspur ranges by cattle in spring should be avoided, as this is the most dangerous period for livestock.

The issue of noxious plants may prove very difficult to resolve. Given present policy against the use of herbicides, no immediate control or eradication is anticipated. Future efforts may involve using any biological control methods available and developing an areawide control program that would allow for the use of herbicides where necessary.

Finally, the division of old grazing units into small grazing allotments concentrated livestock on small areas for an entire grazing season. This season-long concentration has resulted in poor condition range which could be improved with deferment of grazing to other pastures, delay in turnout, or rotation with adjoining allotments.

TERRESTRIAL WILDLIFE HABITAT

General Overview

Visually, only two major vegetation communities are obvious. The sagebrush/grass complex covers approximately 86 percent (395,000 acres) of the resource area. Wyoming big sage dominates approximately half that acreage (8- to 11-inch precipitation zone). This lower precipitation zone supports various inclusions of shadscale, basin big sage, saltbush, and other species. Three-tip and mountain big sage make up the remaining half of this biome (11- to 22-inch precipitation zone).

The coniferous zone presents an abrupt and stark contrast to the sagebrush range. Small inclusions of spruce, white-bark pine, and subalpine firs are mixed in with the dominant Douglas fir and lodgepole pine types. Forested habitat covers about 55,000 acres (12 percent) of the resource area.

The remaining 2 percent of the resource area is made up of riparian areas or small deciduous stands. Obvious by its almost total absence is the mountain brush zone common to many other regions.

In spite of seemingly limited vegetation diversity, the Lemhi Resource Area has a rich variety of wildlife species. This variety is a function of a wide precipitation and elevational range that promotes high desert to alpine environments.

Public lands within the area provide key summer and winter range for elk, deer, antelope, cougar, bear, and a few bighorn sheep, mountain goats, and moose. A number of bighorn reintroductions are planned. The first occurred January 14, 1985, with the release of 22 bighorns at Rocky Canyon east of Leadore.

Upland game birds such as pheasant, chukar, Hungarian partridge, sage-grouse, and forest grouse (blue, spruce, and ruffed) are common to the area. Riparian habitat supports many species of waterfowl, shorebirds, and nongame birds as well as a recently introduced turkey population. Bald eagles are common to the Salmon and Lemhi rivers during the winter. Reports of two other threatened and endangered species, the wolf and peregrine falcon, are extremely rare.

A host of other species typical of sage/grasslands and coniferous forests are also present (see species list).

Deer, elk, antelope, and sagegrouse are the most abundant and widely dispersed of the game species. They also hold the most public interest from an economic, recreational, and visual (nonconsumptive) standpoint. Bighorn sheep are expected to become more important as their population and distribution increase. Only these major species will be addressed in detail in this document due to space limitations. Other species of game and nongame shall be commented on as appropriate. Idaho sensitive species are not specifically addressed but management actions potentially influencing these species will be in accordance with the Bureau's Sensitive Species Management Direction (BLM/IDF&G MOU 1977).

Habitat conditions vary from very poor (primarily riparian/wetlands) to quite good in some of the higher and steeper mountain big sage areas. From a historical perspective, general range condition is probably the best it has been in about the last 100 years. Livestock grazing is the most influential external factor affecting current habitat condition. Fire, or the lack thereof, has also markedly affected habitat condition. With aggressive suppression there has come a general trend toward habitat monotony (reduced diversity). Logging and mining have left their mark on wildlife habitat and its use. Frequently, adverse impacts to habitat condition caused by logging and mining have been related more to the access they have created rather than the activities themselves.

Some of the general factors considered in rating habitat condition were:

- Apparent health and age of key herbaceous and browse species
- Apparent forage diversity
- Livestock utilization of key vegetation species on important use areas
- Ecological range condition
- Water availability
- Obstructions (fences and roads)
- Presence or absence of key vegetation species in riparian zones and plant community vigor

Wildlife (cattle equivalent) animal unit months (AUMs) were calculated from 1990 population projections developed with the Idaho Department of Fish and Game. Cattle equivalent AUMs are based on estimated air-dry forage required per hundredweight of body weight per day for a mean-weight animal of a particular species. Calculation procedures are consistent with those developed for the Challis Environmental Impact Statement (EIS) and subsequently used in the Ellis-Pahsimeroi EIS.

Threatened and Endangered Species

Three wildlife species federally classified as threatened or endangered under the Endangered Species Act of 1973 (50 CFR 402, 43 CFR 870) occur in the Lemhi RMP area.

Bald Eagle

Bald eagles occur only as winter migrants. Arrival dates vary somewhat between years, but normally sightings are reported by mid-November. Dispersal from the area generally occurs around midto late March most years. The Salmon River is preferred for roosting and hunting. Although a five-year average of bald eagle counts indicates that 12 birds occupy the RMP area during the winter, the number has varied from 4 to 18 birds, depending on the year. A few birds also use the Lemhi drainage.

Gray Wolf

Gray wolves are occasionally reported on the eastern side of the RMP area along the Montana border in an area from roughly Kinney Creek south to the Eighteenmile drainage. Actual sightings are quite rare, with most having occurred on the Montana side. Indirect evidence (tracks and howling) is only slightly less rare. It appears that on infrequent occasions an animal or two passes through or makes an incursion into the area. There is no evidence indicating a viable population exists.

Peregrine Falcon

Verified peregrine falcon sightings are extremely rare. Only three are known to have been made in the last six years. Two of the sightings occurred on the Salmon River and one along Birch Creek near Blue Dome.

Big Game

Elk

No elk are known to have existed in the resource area at the turn of the century. Current populations originated from two primary sources. The first source was transplants made between 1910 and 1920. The second was the result of population buildup on the Montana side and subsequent "spill-over" into Idaho for wintering. Many of the elk on the east side of the RMP area still summer in Montana.

Current population levels are possibly the highest since prior to 1900. Recent data from the Idaho Department of Fish and Game indicate about 2,000 elk winter on BLM land within the resource area. About 90 to 95 percent also spend an additional two months on BLM land in the early spring. About 2,000 AUMs (cattle equivalent) of forage are consumed by the current population.

Approximately 26,000 acres, or 37 percent of elk winter range, are considered to be in less than satisfactory condition. The remaining acreage receives comparatively light cattle use and is in fairly good condition. Whether this reflects a "cause-and-effect" situation is unknown.

Deer

An estimated 7,400 deer currently utilize the RMP area. A very high percentage (80 to 90 percent) of the use is during the winter and spring. Cattle-equivalent AUM demand is estimated at around 2,800.

Current population status is somewhat mixed. Populations have recovered somewhat from the steep declines of the late 1960s and early 1970s. However, herds associated with the northern part of the Lemhi Range and the Bitterroot Range seem to have lagged behind the herds to the west of the Salmon in their rate of recovery.

Much of the deer winter and spring range is in fair ecological condition. Most of this rating is a reflection of a poor grass and forb component. As previously noted, lower elevation country is almost exclusively a sagebrush community. Nearly all deer winter range is in this low country. With very poor cover in the form of either vegetation or topography, winter exposure factors are extremely high. In the absence of a mountain brush zone and very limited forage diversity, the nutritional level available to deer is probably lower than in many other regions. They may therefore be more susceptable to the weakening effects of exposure, resulting in increased mortality and decreased production rates. Ultimately, fairly wide fluctuation in population levels can be expected.

Antelope

Antelope are exhibiting a slow but fairly consistent upward trend in population levels throughout most of the resource area. This is reflected in general distributional expansion, increased observations in some areas, and increased landowner complaints. Estimates place the current population at around 2,800 animals, with a cattle equivalent AUM demand of about 450. Approximately 1,500 antelope leave the Lemhi RMP area to winter on the Idaho National Engineering Laboratory in the Idaho Falls BLM District.

Approximately 75 percent of the antelope range between about Leadore and Lone Pine rates as satisfactory. From Leadore north, approximately 50 percent rates as satisfactory. The remaining unsatisfactory range is a result of a depleted grass/forb component on about 188,000 acres. The above two areas have about 5.5 and 3.6 antelope per square mile, respectively.

Bighorn Sheep

All of the mountainous country in the RMP area was historic bighorn sheep range. Severe winters, market hunting, and habitat reduction and depletion as a result of extremely heavy livestock use just prior to and following the turn of the century all but eliminated bighorn sheep. Over the intervening years, habitat conditions have improved to the point that bighorn sheep reintroductions have been started.

Sagegrouse

Sagegrouse are the most widespread and heavily hunted species of game bird on the RMP area. Most of the concerted hunting effort occurs from Leadore south. Over the remainder of the area, sagegrouse are frequently taken as a mixed-bag component along with Hungarian partridge and chukars. Hunting popularity is in direct relation to sagegrouse abundance. Currently, populations are uniformly low, although there are some indications an upward trend is starting.

Brood and nesting habitat condition generally follows that of antelope ranges, with a depleted grass and forb component occurring on much of the sagegrouse range. Over most of the RMP area, brood habitat is tied to wet meadows, riparian areas, and springs, which also receive extremely heavy livestock use as a rule. Although moderate use of this habitat by livestock can be beneficial, the current level of use in most cases must be considered a probable limiting factor for sagegrouse production.

FISHERIES HABITAT

The 1978 Idaho Department of Fish and Game Stream Classification system has been used as the primary rating method for all streams in the Lemhi Resource Area. This system has been applied to all perennial streams in Idaho and uses the following value classes for all stream fisheries:

Class I - Highest Priority
Class II - High Priority
Class III - Substantial
Class IV - Limited

All perennial streams not included in these four categories are considered "unclassified" and have very few fisheries values.

Table 3-2 shows the value class categories, as determined by the Idaho Department of Fish and Game, of perennial streams in the Lemhi Resource Area.

TABLE 3-2
STREAM CLASSIFICATIONS

Stream	Class I	Class II	Class III	Class IV	Unclassified
Salmon River	9.5 mi.				
Hayden Creek	1.2 mi.				
Big Timber		1.8 mi.			
Eighteenmile			3.0 mi.		
All Others					82.2 mi.
	10.7 mi.	1.8 mi.	3.0 mi.	0 mi.	82.2 mi.

A total of 112.3 miles of stream in the Lemhi Resource Area were surveyed, and 14.6 miles were dry. Therefore, only 97.7 miles were considered to have aquatic habitat.

Table 3-3 lists the streams having fisheries values on public lands that attract the public. Fish populations occur in other streams on public lands, although observed fishing use is extremely limited. In the Salmon BLM District, and particularly in the Lemhi Resource Area, excellent fishing opportunities exist for both resident and anadromous species. However, almost without exception, these opportunities occur on private land.

TABLE 3-3
STREAM OWNERSHIP AND HABITAT CONDITION

Stream	BLM Owned	Fisheries Potential	Present Habitat Condition
Salmon River	9.5 mi.	9.5 mi.	Good
Big Timber Creek	2.5 mi.	1.8 mi.	Good
Hayden Creek	1.2 mi.	1.2 mi.	Good to Fair Good
Agency Creek	2.3 mi.	1.3 mi.	Good
Haynes Creek	2.0 mi.	2.0 mi.	Fair
McDevitt Creek	6.8 mi.	3.0 mi.	Fair
	24.3 mi.	18.8 mi.	

As can be seen from the above table, only Haynes and McDevitt creeks are in fair condition. These are both unclassified in the Idaho Department of Fish and Game evaluation system. Overall, stream sections offering fishing opportunities on public land are already in relatively good condition.

WATER QUALITY AND WATERSHED

Riparian quality throughout the resource area is generally fair to poor (see Appendix Table D-2) and is in a stable or downward trend, with the exception of the Eighteenmile Management Area. Overutilization by livestock is the main reason for depleted riparian quality. Steep slopes, along with easy access to water, shade, and succulent forage, are the primary reasons for the continual overutilization. Although riparian areas only account for approximately 2 percent of the RMP area, well over 50 percent of forage harvested by livestock is associated with riparian areas. A degraded riparian zone generally implies a corresponding degradation of water quality. As a general rule, low gradient streams with low bank rock content are more adversely impacted by livestock grazing than are high gradient streams.

The severe removal of vegetation has resulted in the inability of riparian areas to filter sediment during snowmelt and thunderstorm events. This, along with reduced bank and channel stability, has resulted in increased sedimentation and a reduction in water quality. Increased sedimentation is one of the most adverse impacts to fisheries habitat. Fisheries habitat is directly correlated with watershed condition.

Bentonitic soils predominate along the foothill areas of the main Salmon River. The same is true of foothill areas of the Lemhi watershed from the town of Lemhi to the confluence of the Lemhi and Salmon rivers. Even in a natural ecological condition, these soils are highly erosive and sparsely vegetated. These areas have a history of receiving heavy livestock use in early spring, resulting in soil compaction, a loss of soil aeration and tilth, and reduced range productivity.

Fair and poor condition characterizes 35 percent of rangelands within all of the area except the Eighteenmile Wilderness Study Area (WSA) A fair or poor range condition indicates areas with less than half of the native vegetation present in a natural ecological condition. The native plants are usually replaced by annual forbs and grasses or noxious weeds, and the areas are sometimes characterized by an increase in shrub density. Not only are these species less desirable for livestock and wildlife forage; they also act poorly as soil stabilizers, increasing sedimentation into downstream water sources and lowering the water quality.

Table 3-4 lists those watersheds in poor condition. It is based on areas having fair or poor range condition along with highly erosive soils. Table 3-5 lists riparian areas most in need of improvement.

TABLE 3-4
POOR CONDITION WATERSHEDS

Muddy Creek
Lower McDevitt Creek
Hot Springs Creek
Sevenmile Creek
Lower Bohannon Creek
Lower Wimpy Creek
Lower Pattee Creek
Lower Warm Springs Creek
Lower Badger Spring Gulch
Lower Baker Creek
Grouse Creek
Lower Trail Creek
Lee Creek
Portions of Freeman Creek
Portions of Henry Creek
Portions of Williams Creek
Mulkey Creek
Portions of Withington Creek
Portions of Lake Creek
Eli Creek
Cow Creek

TABLE 3-5

WATERSHEDS AND RIPARIAN AREAS MOST IN NEED OF IMPROVEMENT

Hot Springs Creek
Eli Creek
Sevenmile Creek
Yearian Creek
Muddy Creek
Baker Creek
Pattee Creek
Henry Creek
Trail Creek
Grouse Creek
McDevitt Creek
Haynes Creek
Badger Spring Gulch
Cow Creek

SOILS

Because of the broad range in elevations, rainfall, and temperatures, the Lemhi RMP area has many diverse and complex soil patterns (map E-1). Each soil series in the area was formed as a result of different dominating forces. These forces are reflected in soil properties such as texture, drainage, degree of development, permeability, and infiltration rate. Soil properties and slope, in turn, affect erodibility and soil productivity.

A third order soil survey, which meets the National Cooperative Soil Survey standards, was conducted in the RMP area by the Soil Conservation Service. This information is available at the Salmon BLM District Office. The soil survey was used for evaluating land use potentials, helping establish potential natural plant communities, establishing initial livestock grazing rates, and predicting erosional responses.

Three major soil parameters are affected by livestock grazing and other land uses: compaction, erosion, and productivity. Some soils in the RMP area have already been affected by past use. Intense grazing practices have affected density and decreased pore space, thereby increasing soil compaction and decreasing infiltration rates. Decreased infiltration rates result in increased runoff, which increases the potential for soil erosion. Rauzi and Hanson (1966) found that infiltration rates and runoff are affected significantly by the intensity of grazing. Packer (1961) indicated that cattle trampling significantly increases soil erosion through increased soil compaction and runoff.

Depleted plant cover and trampled soils are two main factors that contribute to soil erosion of rangelands (Meehan and Platts 1978). Soil erosion affects the area being eroded as well as the waters receiving the eroded material. Erosion of the nutrient-rich topsoil, where most of the organic material is found, reduces site fertility. Sediment, the product of erosion, adversely affects water quality and fish habitat and fills reservoirs.

Areas of heavy livestock use presently occur around existing water troughs, riparian areas, salt licks, valley flats, and shady areas. These areas have been heavily grazed, highly compacted, and moderately eroded, which has resulted in soils with lower productivity. These areas of decreased vegetation and litter cover are also more susceptible to erosion and increased runoff.

Numerous areas currently have some severe accelerated erosion problems, and other areas could develop problems because of potentially high eroding soil types. The soil survey indicates that 50,960 acres, or 11 percent of the public land in the RMP area, have soils with high present or potential erosion.

RECREATION MANAGEMENT

The Lemhi Resource Area offers a wide variety of recreation opportunities such as hunting, fishing, camping, off-road vehicle (ORV) use, float and power boating, and nature trail hiking, among others. This wide range of opportunities is possible because most public lands are accessible and offer a variety of settings suitable for different recreation activities. The preferred setting is important in planning for the recreational use of the public lands because it correlates closely with and defines the nature of recreation activities.

The BLM and Forest Service have adopted a system called the Recreation Opportunity Spectrum. This system provides a method of identifying recreation opportunities available on the public lands and a means to plan for the long-term maintenance of the required settings.

For this RMP, the different settings available on public lands in the Lemhi Resource Area were identified. The settings were formulated using factors such as remoteness, size, amount of landscape change and development, the evidence of other people, and the degree of management control. The Recreation Opportunity Spectrum opportunity settings and descriptions are listed below, along with the degree to which they occur in the resource area.

Primitive (3,840 acres): Large areas more than three miles from the nearest point of motorized access and use that have unmodified landscapes, show little evidence of other people, and are free from management controls.

Semi-primitive Non-motorized (12,800 acres): Areas of moderate size at least one-half mile from the nearest point of motorized access and use that have mostly natural landscapes, show some evidence of other people, and have few management controls.

Semi-primitive Motorized (17,280 acres): Areas of moderate size near primitive roads and trails. These have mostly natural landscapes where there are often evidences of other people but numbers remain low and where management controls are evident but not dominant.

Roaded Natural (416,371 acres): Areas near improved roads having naturally appearing, but modified, landscapes. There are other people, but interaction is low to moderate and management controls are subtle.

Rural (9,275 acres): Areas along major travel routes having modified landscapes. Other people are frequently encountered and management controls are easily seen.

Outdoor recreation resources on government administered lands in the region attract visitors from local communities, throughout the nation, and internationally. Major attractions include rafting on the Main and Middle Forks of the Salmon River and the outstanding fishing and hunting that are offered throughout the region. The BLM administered lands in the resource area, while not containing the major recreation attractions, do play a significant role in the regional recreational setting. They add another dimension to the available recreation opportunities by providing generally unrestricted settings for dispersed activities.

According to the 1983 Statewide Comprehensive Outdoor Recreation Plan, more camping and picnicking sites are needed. Most of this need results from out-of-county visitors, since the increased needs exceed the projected county population increases. BLM could help meet the need for additional sites.

To be responsive to increased recreational use and demands, BLM has identified key areas within the resource area where intensive management is needed to maintain recreation opportunities and other resource values. These areas are called special recreation management areas and include the Continental Divide National Scenic Trail, the Lewis and Clark National Historic Trail, and the Main Salmon River.

These three areas represent about 3 percent of the Resource Area. The remaining 97 percent is an extensive recreation management area; significant recreation opportunities and problems are limited and intensive management is generally not required. Table 3-6 shows BLM management areas and the major developed and undeveloped BLM recreation sites.

TABLE 3-6
RECREATION MANAGEMENT AREAS
AND
BLM DEVELOPED/UNDEVELOPED USE SITES

Management Area/Site	(D) Developed (U) Undeveloped	Primary Recreation Activities	ROS[2] Settings
Lemhi (ERMA)[1]		Hunting, fishing, ORV, horseback riding, camping, snowmobile trials	All
McFarland Campground	D	Camping, fishing, picnicking	
Agency Cr. Campground	D	Camping, picnicking, snowmobile trailhead	
Smokeys Cubs Campground	D	Camping, picnicking	
Williams Lake Campground	D	Camping, picnicking	
Salmon River (SRMA)[1]		Boating, fishing, camping, picnicking, nature study, games	R, RN
Camp Creek	U	Boating, fishing	
Elevenmile	U	Boating, fishing	
Shoup Bridge Recreation Site	D	Boating, fishing, camping	
Morgan Bar Recreation Site	D	Boating, fishing, picnicking, horseshoes, volleyball, nature study	
Tower Rock Access	D	Boating, fishing, picnicking	
Continental Divide Trail (SRMA)		Hiking, ORV, hunting, camping	P, SPNM, SPM, RN
Lewis and Clark Trail (SRMA)		Hiking, ORV, hunting, camping	SPM, RN

1. ERMA: Extensive Recreation Management Area
   SRMA: Special Recreation Management Area

2. Recreation Opportunity Spectrum Settings (ROS):
   R = Rural
   RN = Roaded Natural
   SPM = Semi-primitive Motorized
   SPNM = Semi-primitive Non-motorized
   P = Primitive

Twenty-nine miles of the Continental Divide lie within the resource area. A 1980 Management Option Plan for the Continental Divide National Scenic Trail recommended that 20 miles be included in the actual trail treadway when it is finally located on the ground. The remaining nine miles are located on U.S. Forest Service lands in Montana.

The Lewis and Clark Trail crosses three segments of public lands. The longest portion between Agency and Sandy creeks is marked with Lewis and Clark Trail signs.

The Main Salmon River is receiving increasingly heavy use from float-boaters and steelhead fishermen. Because most of the shoreline is privately owned, public lands along the river are critically needed for general public access.

Off-road vehicle (ORV) use occurs on public lands throughout the resource area. Motorized vehicles generally provide a means of transportation for hunting, fishing, sightseeing, and other recreation activities. All of the resource area is open to unrestricted ORV use except the Eighteenmile Wilderness Study Area (use of existing trails only) and 16,230 acres in Agency Creek (winter use restrictions).

VISUAL RESOURCES

The visual aspect of most of the resource area is one of rural, ranch-oriented land uses. The valley bottoms or foothill areas administered by BLM are characteristically sagebrush/grass hills used as grazing areas. The higher elevation lands (some of which are under BLM's jurisdiction) contain the forested areas and alpine meadows.

The lands adjacent to Salmon are less natural in aspect because of human activities related to off-road vehicle (ORV) use, dumping, past land uses and modifications, and a lack of land use ethics. The resource area is crisscrossed by roads (built to various standards) and fences that may attract the attention of casual visitors but are almost unnoticed by area residents. Mining roads and prospects, mostly abandoned, are rarely rehabilitated and in some areas, particularly around Leadore, they are visually evident.

Aesthetic values of the public lands have become increasingly important to the American public over the past several years. These values have been reflected in the planning and management of the public lands through BLM's Visual Resource Management System. The system establishes criteria for the identification and classification of scenic quality and the degree of public concern toward that quality, and it defines management objective classes for alteration of the visual resource. The classes indicate the overall significance of the visual environment by showing the degree of acceptable change within a landscape and setting forth standards and measures necessary to reduce or eliminate visual impacts. The following is a description of the four management classes found in BLM's Visual Resource Management System.

Class I: The objective of this class is to preserve the existing character of the landscape. Areas include those where the goal is to provide a landscape setting that appears unaltered by man.

Class II: The objective of this class is to retain the existing character of the landscape. The level of change to the landscape features must be low and not attract the attention of the casual observer.

Class III: The objective of this class is to partially retain the existing character of the landscape. The level of change to the landscape features must be moderate and not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant features of the characteristic landscape.

Class IV: The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change may be high. Changes may dominate the view and be the major focus of viewer attention. However, every attempt must be made to minimize impacts.

Lands within all four visual resource management classes have been identified for the resource area and are listed below.

Class I - 29,327 acres: Two areas, the Eighteenmile Wilderness Study Area (WSA) and the Salmon River, have been inventoried as Class I areas. The Class I rating is temporary since it is based on the potential for wilderness or wild and scenic river designations. The Class I rating would remain if the areas were designated; if not, the areas would revert to a lower class. The Eighteenmile WSA includes 24,922 acres and the Salmon River 4,405 acres.

Class II - 15,720 acres: This class includes lands along the Salmon River within approximately 1 mile of the river and adjacent to the Class I area.

Class III - 183,200 acres: This includes foreground and some middleground areas along Highways 28, 29, and 93 and principal access roads in areas sensitive to public view where alterations are noticeable.

Class IV - 231,319 acres: This class includes background and seldom seen areas not along travel routes or not sensitive to public view where land use modifications can be visually evident.

Management objectives for the four classes are met through the application of standard operating procedures. Procedures include a review of individual projects for impacts on visual resources and measures that will be taken to meet the class objectives. In some cases, actions may be taken to enhance the visual quality and bring a specific site up to the standards of the class it is located in.

WILDERNESS RESOURCES

The wilderness inventory for the resource area identified one area, Eighteenmile (24,922 acres), as a wilderness study area (WSA). The WSA borders lands under roadless/wilderness study in the Salmon, Beaverhead, and Targhee National Forests.

The following is a discussion of the wilderness resources for the Eighteenmile WSA.

Size and Physical Characteristics

The unit contains 24,922 acres of BLM land. This figure differs from the 19,280 acres shown in the August 1979 report. During intensive inventory it was felt that the initial inventory boundary, drawn along an elevation line on most of the western side, had been incorrectly located; it should have followed the land ownership pattern in most instances.

The WSA is located along the Idaho side of the Continental Divide from Baldy Mountain south to Eighteenmile Peak. The topography is mountainous with numerous deep creek valleys draining into Eighteenmile Creek to the west. The Continental Divide offers rolling meadows and precipitous cliffs. Elevation varies from 7,600 to 11,141 feet. Vegetation varies from lowland sage-grass communities up through Douglas fir, lodgepole pine, and limber pine to grassy meadows on the Divide. Willow-aspen riparian vegetation occupies most creek bottoms.

Naturalness

The imprint of man in the unit is largely unnoticeable. A few range developments exist, the most prominent being a ditch leading from Shears Creek to several water holes. Mining is taking place in Clear Creek just outside the unit's border.

Solitude

The rugged terrain, vegetative screening, remoteness, and limited accessibility of the unit provide an outstanding opportunity for solitude.

Primitive and Unconfined Recreation

The unit offers outstanding opportunities for backpacking, rockhounding, hunting, wildlife viewing, and cross-country skiing.

Supplemental Values

Supplemental values include the reported sighting of wolves, an endangered species in the vicinity.

Rehabilitation

Several short jeep trails exist which could revegetate easily if left unused.

FIRE MANAGEMENT

Under the present situation, the policy is to attack all fires in the planning area so as to have them contained before the next burning period or to hold them to less than 10 acres. There are some areas with increased housing development that must receive a very high level of protection (value Class IV). U.S. Forest Service lands border the planning area in many places. Increased protection is required for most areas that are adjacent to Forest Service lands to prevent the spread of fires to timber-producing stands.

The Salmon BLM District has initial attack responsibility on U.S. Forest Service lands. These lands border public land in the general area around Salmon.

Lands are given value classes from I to VI, with VI being the highest value. The value class assigned to a specific area is based on a value at risk. The value at risk depends on what could be adversely affected if a fire burned in that area. These values at risk can be either natural or manmade and include forage, timber, buildings, watersheds, historical sites, esthetic values, and wilderness.

At present the Bureau protects about 1,000 acres of historical lands, watershed areas for townsites, and recreation sites (value class IV) in the planning area. There are seven areas that have homesites bordering BLM lands, with at least 10 homes that could be burned by fires spreading from BLM lands. Otherwise, the BLM lands bordering U.S. Forest Service lands represent the highest value at risk. The majority of these are class III to class IV.

The 24,922-acre Eighteenmile WSA currently has a modified suppression status. In addition, there are some scattered areas where modified suppression is very feasible. These consist of mountain areas where talus slopes and slide rock prevail. Lightening does strike lone trees on these slopes, but this poses no threat to the surrounding vegetation. When a lone tree is struck, it is checked and, if feasible, monitored while it burns out. This strategy is modified only if BLM receives too many calls from the public or if the fire might spread to adjacent fuels.

At present there is a 1,000-acre hazard reduction project that is proposed, depending on availability of equipment. This hazard reduction project consists of removing fuel that could carry fire in an area that has the potential for a large disaster fire. The standing and fallen dead trees, plus logging slash, are the fuels that would be removed by this project.

Fire can be used as a resource management tool to enhance other resources, reduce fire hazards, and protect improvements throughout the Lemhi Resource Area.

Since 1970, there have been 316 wildfires on BLM administered lands in the RMP area (Tables 3-7 and 3-8). These have burned a total of 6,258 acres. On the average, 417.2 acres are burned every year, with each fire averaging 19.8 acres.

TABLE 3-7
FIRES IN THE LEMHI RESOURCE AREA FOR THE PAST 15 YEARS

Year	Number of Regular Fires	Acres Burned	No. of Project Fires*	Acres Burned
1970	15	126		
1971	11	31		
1972	19	33		
1973	11	25	1	250
1974	25	293	2	650
1975	10	4		
1976	15	24		
1977	13	49		
1978	24	52		
1979	38	87		
1980	20	16		
1981	48	1,301		
1982	28	167	4	1,670
1983	11	733	1	720
1984	20	27		
TOTALS	308	2,968	8	3,290

*Project fires are large fires that required additional fire suppression forces because they exceeded the Salmon BLM District's firefighting capability.

TABLE 3-8
LARGE (PROJECT) FIRES IN THE LEMHI RESOURCE AREA

Year	Name of Burn	Acres Burned
1973	Muddy Creek	250
1974	Spar Canyon	300
1982	45th Parallel	880
	Warm Springs	130
	Mulkey Creek	110
	Briney Creek	550
1983	Warm Springs	720

CULTURAL RESOURCES

BLM lands within the Lemhi Resource Area contain 106 recorded cultural resource sites, portions of two historic trails and their associated sites, portions of a historic railroad route, and portions of a historic Indian reservation. Both prehistoric and historic occupations are represented. Site types include rock shelters, rock alignments and structures, rock art or pictographs, prehistoric and historic scatters, and historic roads and trails.

Prehistoric sites are generally typical of the northern Great Basin and range from isolated artifacts to large semipermanent winter camps. Historic sites range from Indian sites to sites that reflect the adaptation of Euro-American culture to the western United States. Most visual historic sites are related to mining and ranching, which provided the basis for historic Euro-American settlement and subsistence in this area. The three most important travel routes within the Lemhi Resource Area include portions of the Lewis and Clark Trail, the Nez Perce Trail, and the Gilmore and Pittsburg Railroad.

The cultural resources in the Lemhi Resource Area range in significance from high to low and are scattered throughout the region. Analysis of the present management situation for cultural resources within the Lemhi Resource Area relies on existing data from site survey files; literature concerning historical, archaeological and ethnographic sources; consultation with individuals knowledgeable of the cultural resources in the area; and the results of a class II sample survey of portions of the resource area.

BLM inventoried 2.9 percent or 13,440 acres, of the public lands in the Lemhi Resource Area during the summer of 1983. Although formal evaluations of the quantity and quality of the information contained in the sites have not been undertaken, it is assumed that a number of the sites contain information important to history or prehistory and are eligible for inclusion on the National Register of Historic Places. Three sites associated with the Lewis and Clark Trail are currently listed on the National Register. These are the first Idaho campsite, the first flag unfurling, and the Pattee Creek Camp.

Among the unique features of the Lemhi Resource Area are the historic Lemhi Indian Reservation and the 40-acre Chief Tendoy Cemetery, where Chief Tendoy and a number of other Indians are buried. The Chief Tendoy Cemetery was once a part of the Lemhi Indian Reservation. Many of the Fort Hall Reservation tribal members, as well as the local Lemhi Indians, are descendants of the Sheepeater, or Mountain Shoshoni tribe, and of the Lemhi Indians who resided in the Lemhi River Valley until the reservation at Lemhi was closed and most Indians moved to Fort Hall in 1907. The Lemhi Valley holds strong memories for the Lemhi Shoshone and is considered to be part of their "motherland."

There are a number of burials and other sacred sites that need special management and protection. These are scattered throughout the Lemhi River Valley on both public and private lands. The values, memories, and traditions attached to portions of the Lemhi Valley by the Lemhi Indians are as important as the material remains. The Lemhi River Valley is an area of special cultural resource significance because of the high socio-cultural values the Lemhi Shoshone place on it as a significant part of their heritage. The American Indian Religions Freedom Act (PL 95-341) emphasizes the consideration of impacts of federal government policies and procedures on American Indian religious freedoms.

Areas with the highest concentration of sites or the most significant sites, based on current information, have been identified. Five areas need management plans to protect highly valued and significant cultural resource sites. Cultural resource management plans would identify the necessary measures for the proper protection and utilization of cultural resources. Plans should be prepared for the Chief Tendoy Cemetery, Indian Areas A and B, the Salmon River corridor, and the Lewis and Clark Trail.

The Salmon River corridor represents the highest density of archaeological sites in the Salmon BLM District. Many of the larger terraces on the Salmon River with high potential for the presence of archaeological sites are in private ownership (and under cultivation), leaving the BLM parcels along the river as the only undisturbed lands on the river still available for archaeological research. Preparation of a management plan for the cultural resource sites on public lands along the Salmon River corridor is necessary because of the increasingly heavy demands by recreationists for boating and fishing.

THREATENED AND ENDANGERED PLANTS

Physaria didymocarpa var. lyrata is presently listed as a federally endangered species. A monitoring plan has been developed in conjunction with the U.S. Fish and Wildlife Service. It is known to exist in and around the Williams Creek shale pit, which is an active shale pit.

ECONOMIC CONDITIONS

Introduction

This RMP covers public land in Lemhi County, Idaho. Where possible, economic activity originating just from public land in the county has been identified. For most resources, though, economic activity is reported only on a countywide basis, so most discussions will pertain to the county as a whole.

Income

Total personal income in Lemhi County was $59.3 million in 1982 (Bureau of Economic Analysis 1984). This represents an increase of 45 percent since 1978. However, if the effects of inflation are considered, then real income has actually declined in the County by 2 percent (Council of Economic Advisors 1983). During this same time period (1978-1982), actual farm income has declined by 15 percent. After adjusting for inflation, this decline becomes 42 percent. Figures 3-1 and 3-2 graphically portray the Lemhi County economy. Table 3-9 shows the major industries in Lemhi County and the personal income generated by those industries.

FIGURE 3-1

PERSONAL INCOME-LEMHI COUNTY

ADJUSTED FOR INFLATION

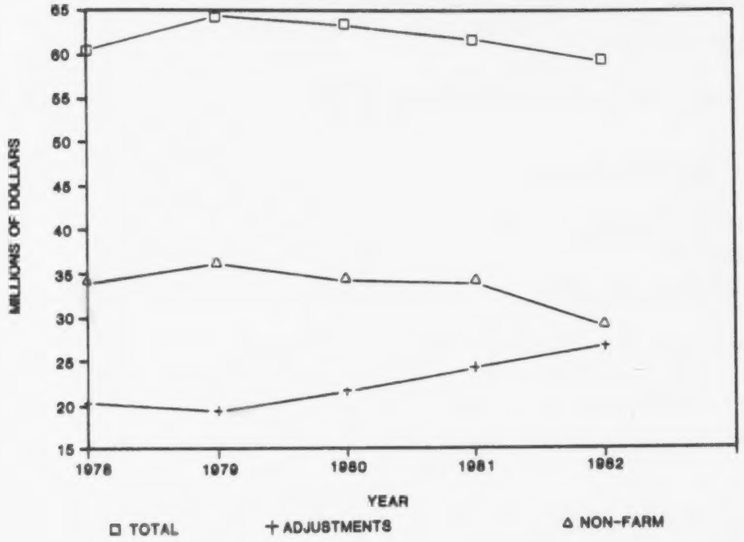


FIGURE 3-2

SELECTED INDUSTRIES

ADJUSTED FOR INFLATION

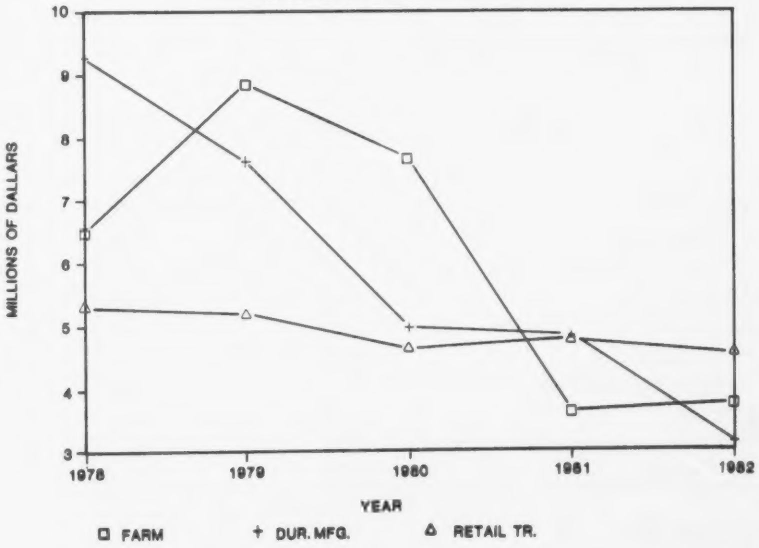


TABLE 3-9
PERSONAL INCOME-LEMHI COUNTY
(thousand of dollars)

Industry	1978	1982	% Change*
Farm	$ 4,396	$ 3,745	-42
Non-Farm	22,887	28,975	-14
Durable Manufacturing	6,264	3,132	-66
Retail Trade	3,593	4,528	-15
Federal Government(civilian)	3,335	6,164	+25
Adjustments**	13,618	26,623	+32
Total Personal Income	$40,901	$59,343	- 2

*After accounting for the effects of inflation.
**Adjustments for contributions for social insurance; residence adjustments; transfer payments;dividends,interest, and rent.

Employment

Total employment in Lemhi County was 2,958 in 1982 (Bureau of Economic Analysis 1984). This represent an increase of 1 percent since 1978. During this time, employment levels have remained fairly constant, although the industry mix of employment has not. Most industries have maintained a steady (although very slow) increase in employment levels, but durable manufacturing has gone from 347 to 136, a decrease of 61 percent. Figures 3-3 and 3-4 show the employment trends in the county during the 1978 to 1982 period. Table 3-10 shows the major industries in Lemhi County and their employment levels.

TABLE 3-10
EMPLOYMENT IN LEMHI COUNTY

Industry	1978	1982	% Change
Farm(Total)	465	470	+ 1
Farm Proprietors	291	289	- 1
Farm Wage and Salary	174	181	+ 4
Non-Farm(Total)	2467	2488	+ 1
Proprietors	440	495	+13
Wage and Salary	2027	1993	- 2
Durable Manufacturing	347	136	-61
Retail Trade	427	436	+ 2
Federal Government(civilian)	249	321	+29
Total Employment	2932	2958	+ 1

Specific Industries

Crop Agriculture

In 1982, cash receipts from agricultural marketings totalled $12.6 million in Lemhi County. Of this total, $1.1 million, or 9 percent, was from crop production (Bureau of Economic Analysis 1984). Alfalfa hay is the predominant crop in Lemhi County. Although current records are not

FIGURE 3-3

LEMHI COUNTY EMPLOYMENT

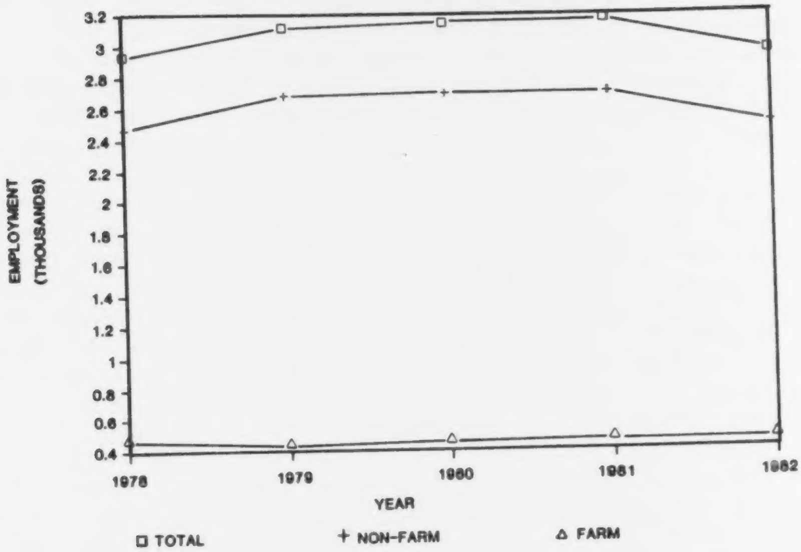
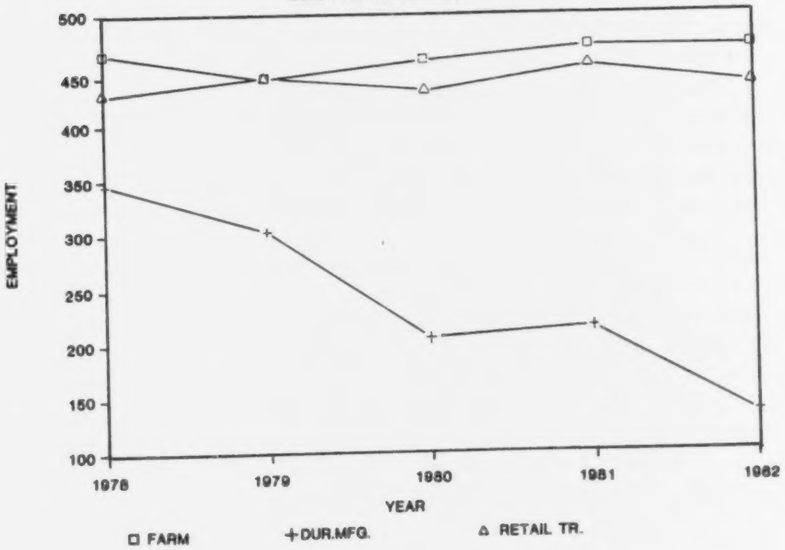


FIGURE 3-4

LEMHI COUNTY EMPLOYMENT

SELECTED INDUSTRIES



available, data for the years 1978 and 1979 showed 46,800 acres in alfalfa production with a production of roughly 100,000 tons (USDA SRS 1980). In 1982 there were 3,500 acres of barley planted with a production of 222,000 bushels (USDA SRS 1984). Based on the cash receipts from marketings, it is estimated that 9 percent of total farm income and employment results from crop production. This would mean that in 1982, crop agriculture income was $337,000. Employment would have been 42.

The U.S. Forest Service's IMPLAN input-output model was used to determine what this level of direct income and employment would mean to the Lemhi County economy as a whole. The personal income multiplier for crops estimated by the model is 2.0863. This means that, for every dollar of income generated by the crop agriculture industry, another $1.0863 in income is generated elsewhere in the local economy and spreads through virtually all economic sectors, including households. Given the multiplier, the total crop agriculture contribution to the Lemhi County economy in 1982 was $703,000, or 1 percent of the total county economy. The employment multiplier for crops was estimated by IMPLAN to be 1.6984. This means that, for every job in the crop agriculture industry, another .6984 jobs are created elsewhere in the local economy. This would equate to 29 additional jobs, for a total of 71 jobs in the local economy resulting from the crop agriculture industry in 1982. The 71 jobs represented 2 percent of the total Lemhi County employment.

Livestock

Livestock (meat and dairy animals and poultry) accounted for 91 percent of total cash receipts from agricultural marketings in 1982 (Bureau of Economic Analysis 1984). This means that livestock production accounted for $11.5 million in cash receipts. Based on this, it is estimated that livestock production resulted in income and employment of $3.4 million and 428, respectively. Meat animals constitute 98 percent of total livestock marketings. This would translate into income and employment related to meat animal production of $3.3 million and 419 jobs.

There are approximately 51,500 cattle and calves in Lemhi County. There are also approximately 11,750 sheep and lambs (USDA SRS 1980). Given the high percentage of federal land in the County -- 91 percent of all land is federally owned and 20 percent is administered by the BLM -- livestock production is highly dependent on federal grazing privileges. Permittees who use BLM lands in the RMP area own about 29,000 cattle and 8,000 sheep. This represents 56 percent of the county's cattle inventory and 68 percent of the sheep inventory. Based on this, it is estimated that permittees using BLM lands generate 57 percent (based on total animal unit month, or AUM, requirements) of the Lemhi County meat animal income and employment. This would amount to $1.9 million in income and 239 jobs. The $1.9 million represents 51 percent of total Lemhi County farm income and 3 percent of total county income.

The income and employment multipliers estimated by IMPLAN for the meat animals sector of the local economy are 3.6405 and 2.8168 respectively. This means that the total contribution to the Lemhi County economy of the meat animal sector is $12.0 million and 1180 jobs. These values represent 20 percent of total county personal income and 40 percent of total county employment. The income and employment generated by BLM permittees would account for $6.8 million (12 percent of total county income) and 673 jobs (23 percent of total county employment).

The permittees in the Lemhi RMP were split into four size groups to determine whether one size was either more, or less, dependent on BLM grazing than another. Table 3-11 shows the basic permittee statistics by size group.

TABLE 3-11
BASIC PERMITTEE STATISTICS

Size Group	No. of Permittees	Total Herd Size		Total Forage Needs (AUMs)	BLM Forage Used (AUMs)	Percent Forage Provided By BLM
		Cattle	Sheep			
1. 0-119 Cattle	46	2,250	1,330	33,792	6,942	21
2. 120-200 Cattle	30	4,862	2,700	64,824	8,894	14
3. 201-350 Cattle	24	6,546	1,470	82,080	11,623	14
4. 351+ Cattle	20	15,061	2,500	186,732	25,082	13
Total	120	29,019	8,000	367,428	52,541	14

These statistics show that size group 1 (0-119 cattle) is considerably more dependent on BLM grazing (21 percent versus 13 to 14 percent) than are the other size groups. These smaller operators also use a smaller percentage of Forest Service grazing than the other groups, making what happens to their BLM permits that much more important.

It is fairly well recognized in the livestock and banking industries that federal grazing privileges have a capital value. That is, federal AUMs add to a ranch's total value when trying to get a loan at the bank or when selling the ranch. Different researchers have reported different dollar values for these AUMs (Boly 1980; Fowler and Gray 1980; Winter and Whittaker 1979; Nielson and Workman 1972; USDA 1925); the values have ranged from $677 to $3,000 per AUM. Based on these values, the BLM AUMs (active preference) in the Lemhi RMP area would have a capital value of between $3.6 million and $16.0 million. BLM's position on permit values is based on very explicit language in Section 3 of the Taylor Grazing Act of 1934, which states that "so far as consistent with the provisions of this Act, grazing privileges recognized and acknowledged shall be adequately safeguarded, but the creation of a grazing district or the issuance of a permit pursuant to the provisions of this Act shall not create any right, title, interest, or state on or to the lands." Thus, any capitalized value associated with grazing permits has no legal basis, and as a result, a rancher cannot be compensated for loss of this value.

Recreation

Expenditures for recreational activities in the region affect primarily the retail trade and services sectors of the local economy. The 1980 Survey of Hunting and Fishing data (U.S. Fish and Wildlife Service 1980) indicates that in destination-type expenditures (meals, lodging, transportation, ammunition, land use fees, etc.), the retail trade sector is affected the most. Table 3-12 shows the direct impact of a dollar of recreation expenditure by type of activity.

TABLE 3-12
DISTRIBUTION OF FISHING AND HUNTING EXPENDITURES

Sector	Fishing	Big Game Hunting	Small Game Hunting	Migratory Bird Hunting	Other Hunting
Transportation	$ .01	$ .02	$ .00	$ .00	$ .00
Retail Trade	.95	.97	.99	.99	.99
Services	.04	.01	.01	.01	.01
Total	$1.00	$1.00	$1.00	$1.00	$1.00

A variety of recreational activities takes place on public lands in the RMP area (see Recreation portion of the RMP). However, the exact amount of recreation activity that takes place within the Lemhi RMP area cannot be determined. In addition, expenditure data on activities other than hunting and fishing is not available. For these reasons, the rest of this section will be limited to a discussion of the economic impacts of hunting and fishing in Lemhi County.

The total 1980 fishing demand was estimated at 58,200 activity occasions. The 1980 hunting demand was estimated at 75,300 activity occasions (Idaho Parks and Recreation 1982). Data in the 1980 National Survey of Hunting and Fishing for Idaho identifies expenditures for hunting and fishing by type of expenditure. Destination-type expenditures were $9.43 per day for freshwater fishing and $12.24 per day for all hunting. The definitions of an "activity occasion" and a "day" in the reports by the Idaho Department of Parks and Recreation and the U.S. Fish and Wildlife Service appear to be roughly the same (see Glossary). Thus, the values for expenditures per day have been directly applied to the number of activity occasions. Total 1980 fishing expenditures amounted to $643,000, while total hunting expenditures amounted to $1,080,000 (in 1982 dollars).

Using the U.S. Forest Service's IMPLAN input-output model, these expenditures were converted to personal income. IMPLAN estimated that for every dollar of expenditures in the retail trade sector of the Lemhi County economy, there is $.45 in direct personal income generated. IMPLAN also estimated that there are 62 jobs for every $1.0 million in expenditures in the retail trade sector. This means that the expenditures for hunting and fishing generated $772,000 in income and 108 jobs. The multipliers estimated by IMPLAN for personal income and employment in retail trade were 1.4066 and 1.4512, respectively. Thus, the total contribution of hunting and fishing to the Lemhi County economy is $1.1 million and 157 jobs. This represents 8 percent of total county personal income and 5 percent of the total county employment.

Lumber and Wood Products

Lumber and wood products makes up approximately 95 percent of the durable manufacturing industry in Lemhi County (Hunter 1985; Bureau of Economic Analysis 1984; Idaho Dept. of Employment 1983). Personal income and employment related to the wood products industry amounted to $3.0 million and 130 jobs in 1982. This represented 10 percent of the non-farm income and 5 percent of the total county income. The personal income and employment multipliers estimated by IMPLAN for this industry were 1.5896 and 2.0558, respectively. This means that the other sectors of the Lemhi County economy realized personal income of $1.8 million and employment of 137 jobs as result of activity in the lumber and wood products industry. This totalled $4.8 million (8 percent of the total county income) and 267 jobs (9 percent of total county employment).

Based on employment per million board feet harvested ratios (Ruderman 1983; Schuster, Godfrey, and Koss 1976), it is estimated that the total 1982 harvest in Lemhi County was 14.8 million board feet. BLM's yearly contribution in the RMP area is 1.07 million board feet, or 7 percent of the total. This would mean that $336,000 in income and 19 jobs resulted from timber harvesting on BLM lands.

Since 1982, the lumber industry in Lemhi County has continued to decline, with the lone sawmill closing. No current data on income and employment levels in the county is available.

BLM Management Costs

BLM management costs include the costs associated with day-to-day management of the public lands such as personnel, office space, utilities, etc., as well as the costs of special management plans (allotment management plans, habitat management plans, cultural resource management plans, etc.) and structural and nonstructural improvements to the land (fencing, water development, tree thinning, etc.). Although the cost of fire suppression is a cost of land management, it is not discussed here since it is highly variable, depending on fire occurrences in any given year.

The Bureau's budget system does not allow for direct accounting of the Lemhi RMP area's budget. The total Salmon BLM District budget (excluding fire suppression and reimbursable accounts) is roughly $1.9 million (FY 85). Based solely on the ratio of employees (Lemhi Resource Area employees versus total Salmon District employees), it is estimated that approximately 40 percent of the District budget goes to the Lemhi Resource Area, including support activities. The Lemhi RMP area accounts for roughly 80 percent of the Lemhi Resource Area's responsibilities. This would make the budget of the Lemhi RMP area roughly $600,000. At the present time, there are virtually no activity plans being prepared or land improvements being implemented. These will start up again only after this RMP has been completed.

BLM Revenue Generation

Revenues are generated by collecting various fees and conducting sales of various types. These include grazing fees, mineral royalties, timber sales, land sales, right-of-way fees, material sales (sand and gravel, posts and poles, and firewood), and fees collected at developed recreation sites. Since most of these are reported on a countywide basis, the data presented here is for the county as a whole, including lands that are within the county but outside the RMP area. Table 3-13 shows the revenues generated by activities on public lands in Lemhi County.

TABLE 3-13
REVENUES GENERATED
FISCAL YEAR 1984
(Lemhi County)

Category	Amount
Grazing Fees	$106,000
Mineral Leasing	410,000
Land Sales	34,000
Timber Sales	119,000
Recreation Fees	500
TOTAL	$669,500

It should be noted that very little firewood and very few posts and poles are sold in Lemhi County from BLM lands. In addition, most sand and gravel disposals are in the form of free-use for county road departments.

Receipts to State and Local Governments

A portion of most of the revenues received by the federal government for the use of public lands is shared with the states and counties in which the activity took place. This includes grazing fees (12.5 percent returned to the state, which passes it on to the county of collection), mineral leasing royalties (50 percent returned to the state, which passes on 10 percent of this amount to the county), land sales (5 percent to the state), and timber sales (5 percent to the state). In addition, Lemhi County receives payments in-lieu-of-taxes for federal lands within the county. These payments are based on the population of the county and the amount of federal land within the county. Table 3-14 shows the payments made to the State of Idaho and Lemhi County.

TABLE 3-14
RECEIPTS RECEIVED
FISCAL YEAR 1984

Type of Receipt	State of Idaho	Lemhi County
In-Lieu-of-Taxes	$ 0	$254,300
Grazing Fees	9,700*	9,700
Mineral Royalties	205,000**	20,500
Land Sales	1,400	0
Timber Sales	6,000	0
Total	$ 222,100	$284,500

*All of this amount passed on to Lemhi County.
**Ten percent of this amount passed on to Lemhi County.

The Lemhi County total revenues from all sources for fiscal year 1984 was $1,584,000. The payments made to the county in-lieu-of-taxes (all federal land) and for activities on public land amounted to 18 percent of that total.

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

This chapter analyzes the cumulative impacts of the resource management alternatives presented in Chapter 2 to the environment and communities in the region.

The alternatives are descriptions of management emphases and are designed to guide future decision-making in the Lemhi RMP area; they do not propose specific, on-the-ground projects or actions. Therefore, environmental consequences of the alternatives can be described only in comparative, general terms. In most cases, more detailed or site-specific analysis will be required to implement decisions that are made in this plan. Future analysis will comply with the National Environmental Policy Act and its implementing regulations.

At the end of Chapter 2 is a Comparative Summary of Impacts. This section includes a comparative impact summary table (Table 2-1).

The relationship of short-term use of the environment to the long-term productivity of the resources and the potentially irreversible or irretrievable commitments of resources are described at the end of this chapter.

ASSUMPTIONS

In order to perform this analysis, certain assumptions had to be made. The assumptions allow a projection of the development that would occur if management practices identified in each alternative were implemented. Nothing in these assumptions should be interpreted as constraining or redefining the management practices proposed for each alternative as described in Chapter 2. The assumptions were developed for impact analysis purposes only and are described below.

The impact analysis of land transfer is based on the following assumptions:

1. All of the land listed will be transferred out of federal ownership through the sale process.
2. After the subject lands are sold, the use of the land will change.

The analysis does not consider that detailed analyses of each tract may reveal conflicts or resource values warranting protection, thus removing the parcels from the transfer category. It also does not consider that land exchanges will be an objective and that many of the transfer tracts will be exchanged for lands possessing equal or greater public values (wildlife habitat or improved range management).

The following assumptions apply to operations under the mineral laws for each of the alternatives.

1. Give a generally poor economy and the ready availability of lower priced foreign imports, the U.S. mineral industry is depressed at the present time. Mineral activity within the RMP area is generally low, and it is assumed that activity will remain low for the duration of this RMP (20 years). A shift in importation policy, a shortage of strategic minerals, or a major international confrontation could cause a sudden increase in the level of U.S. mineral exploration and development activity. While this plan assumes a continued low level of activity, protective stipulations and withdrawals (where necessary) have been built into the plan to lessen the impacts of any sudden upswing in mineral activity.

2. A withdrawal will close land to appropriation under the 1872 mining law. If other resource values are sufficient to warrant withdrawal, a parcel of land will be closed to mineral material disposal and solid mineral leasing. Fluid mineral leasing will be permitted only with a "no surface occupancy" stipulation.

3. If resource values are high enough to permit fluid leasing only with a "no surface occupancy" stipulation, the lands will be closed to mineral material disposals and hardrock leasing. These lands will remain open to appropriation under the 1872 mining law.

4. Seasonal restrictions will affect only leasable minerals and mineral material disposals. Because of the nature of mineral leasing, it is assumed that seasonal restrictions will apply only to exploration work. Seasonal restrictions have no direct effect on operations under the 1872 mining law but will be considered in the review of notices or plans of operation filed under the surface management regulations.

5. All proposed restrictions will recognize valid rights on the land existing prior to the effective date of this plan.

6. During any given year, the authorized officer may waive the seasonal or no surface occupancy restrictions if actual conditions do not reflect the need for such restrictions.

7. For fluid mineral drilling adjacent to lands covered with a no surface occupancy stipulation, directional drilling can reach approximately 1/4 mile. The actual distances that can be successfully offset vary widely because of differences in rock type and geologic structure, and directional drilling is not practical in all situations. However, the 1/4-mile value represents a good working figure for directional drilling for the purposes of this document. It is assumed that where BLM administered lands are adjacent to private, state, or Forest Service lands, drilling can take place from the

non-BLM lands. Because of the expense of directional drilling, it is unlikely that it will be attempted unless there is a known target. It is doubtful that there will be any attempts at directional drilling in the near future.

8. Standard stipulations generally do not restrict surface occupancy, but they do provide requirements for surface use and reclamation.

9. Lands recommended as suitable for wilderness designation will be closed to all forms of mineral appropriation, including location, leasing, and sales.

In addition to the preceding assumptions, data on mineral resources is based on an unpublished inventory of mineral resources and activity within the RMP area conducted between 1981 and 1984 by George Babits, the Lemhi Resource Area geologist. The inventory is heavily biased by field observations and the many mineral reports prepared for various land disposal actions. Because of the general nature of the inventory, no references have been directly cited. However, the inventory phase relies heavily on information on the geology and mineral resources of the area as published in the listed references.

MANAGEMENT ACTIONS NOT ANALYZED IN DETAIL

Hazard reduction is part of the normal BLM fire management program. The Salmon District plans to conduct hazard reduction activities to reduce the possibility of disastrous fires on 10,000 acres known to have potential problems with heavy fuel loading. This action is common to all alternatives.

The proposed hazard reduction effort is consistent with the planning criteria used to develop the Lemhi Resource Management Plan. In the long run, the hazard reduction program should prove beneficial to the environment by reducing fire hazard levels and preserving important resources such as timber and wildlife habitat.

No further analysis is made in this document of the proposed hazard reduction action. When details of this action are developed, future analysis will be conducted through the normal BLM environmental analysis procedures.

ENVIRONMENTAL CONSEQUENCES

ALTERNATIVE A

Impacts from Lands Actions

The classification for retention under the Classification and Multiple Use Act would remain unchanged on 422,578 acres. There would be no environmental impact from review of this classification.

Seasonal restrictions on leasing would not significantly affect the availability of lands for mineral exploration and development. However, no surface occupancy restrictions could severely limit the amount of land accessible to drilling; under this alternative, there would be 15,640 acres that could not be reached by directional drilling using current technology. The resource evaluation reports received in the past three years and the present pattern of leasing (approximately 90 percent of the lands available for leasing are presently under lease), suggest that the entire resource area is "prospectively valuable" for oil and gas leasing. Approximately 41,280 acres (9 percent) of the resource area is prospectively valuable for geothermal resources. Under this alternative, 19,340 acres (47 percent) of the prospectively valuable geothermal land would be under seasonal occupancy restriction but none would have the no surface occupancy restriction. No land prospectively valuable for solid mineral leasing would be closed to exploration or development.

Of the 2,346 acres withdrawn from mineral entry under this alternative, 1,025 acres (44 percent) have moderate potential, while the remainder have low potential for mineral development. Mineral materials are generally widespread throughout the resource area, so closing 27,267 acres (6 percent of the resource area) would have no significant adverse effects.

Conclusion: The impacts to the availability of public lands for minerals exploration and development would be insignificant.

Impacts to Timber Yield and Availability

The present sustained yield allowable cut for the planning area is approximately 10.71 million board feet per decade. This harvest level must be maintained through Fiscal Year 1988, when a new 10-year allowable cut will be computed.

Harvest practices such as clearcut, shelterwood, and selective cut would influence vegetation cover on approximately 300 acres each year. These harvest activities would benefit forest resources by regenerating the stand, reducing insects and disease through removal of infected trees, and improving growth and production of residual trees.

Forest development practices such as thinning, planting, and use of herbicides would be implemented on available commercial forest lands. The beneficial impact of these silvicultural techniques would be improved stocking levels and growth rates and a decrease in insect and disease problems in these stands.

All 30,309 acres of suitable commercial forest land would be available for intensive forest management. No set-asides or restrictions would be imposed.

Other forest lands available for management would include all 26,269 acres of woodland. Management of this woodland would increase the production of non-sawtimber products such as firewood and Christmas trees.

Conclusion: There would be no adverse impact on timber yield or on the availability of commercial forest lands and woodlands. All suitable commercial forest land would be open to woodland product sales.

Impacts to Livestock Grazing

Under this alternative the initial stocking level would be 52,541 AUMs. This represents an 18 percent reduction from the current active preference of 63,898 AUMs. The long-term stocking level would be 53,633 AUMs. This would be a 2 percent increase from the initial stocking level due to the activation of grazing use in some allotments which have been in partial nonuse for several years. A total of 5,422 acres identified for possible transfer could result in the loss of an additional 735 AUMs. Five allotments could be eliminated and 25 other allotments could be reduced.

Conclusion: Under this alternative, there would be no change in the 5-year average use so there would be no impact to livestock operations. The long-term increase of two percent would be insignificant.

Impacts to Range Vegetation

The current ecological range condition is 1 percent excellent, 59 percent good, 30 percent fair, 0 percent poor, and 10 percent unmapped. In the long-term, the downward trend areas would be expected to decline slightly in ecological range condition as undesirable species (noxious weeds and sagebrush) increased in density. The upward trend areas would be expected to change to good ecological range condition. The long-term ecological range condition is expected to be 1 percent excellent, 61 percent good, 28 percent fair, 0 percent poor, and 10 percent unmapped.

The current apparent trend is 27 percent upward, 59 percent static, and 13 percent downward. In the long-term, the upward trend areas are expected to stabilize near the potential plant community and level off at a static trend. The downward trend areas are expected to remain downward as undesirable plant species (noxious weeds and sagebrush) continued to increase in density. The long-term apparent trend would be 86 percent static and 14 percent downward.

The recent overutilization of riparian and meadow areas by concentrations of livestock would be slightly reduced through riparian fencing.

Conclusion: There would be significant negative impacts to range vegetation because of the current amount of unsatisfactory (fair and poor) ecological condition range that would not change.

Impacts to Crucial Wildlife Habitats

The acreage of improved ecological condition would be small (9,200 acres) and would be diffused throughout the RMP area. As a result, no measurable improvement in various wildlife ranges is anticipated.

Twenty percent of the water-deficient acreage would be improved through installation of four 500-gallon guzzlers. More efficient range use by antelope (Copeland 1980), sage grouse, and nongame species is anticipated.

About 20 percent of fences known or suspected to create a hazard or movement problems for big game would be corrected. Though not quantifiable, fewer deaths, fewer injuries, and more efficient range use, by big game, are to be expected.

Thermal and escape cover qualities of all commercial timber areas associated with crucial elk winter range would remain in potential jeopardy. Though similar to Alternative E, less forest development (thinnings, etc.) would be expected under this alternative.

All multiple species crucial areas, 60 percent of known raptor nest sites, 100 percent of known sage grouse strutting grounds, 100 percent of crucial elk winter range, and 100 percent of known burrowing owl habitat would be potentially vulnerable to various degrees of destruction from mineral activity. However, seasonal use restrictions on mineral activity on 82 percent of important seasonal ranges would promote optimal habitat utilization by various species, preserve traditional dispersion patterns, and minimize potentially damaging effects of human-induced stress (Selye 1950; Wynne-Edwards 1972).

Under this alternative, none of the state and private land needed to preserve crucial habitats would be obtained. In jeopardy would be a migration corridor for about 450 head of antelope, 1,920 acres of critically located crucial deer and antelope winter range, and an elk breeding area involving about 75 head.

Land transfers would primarily affect antelope winter range. Under this alternative, 14 percent of the winter range in the Grouse Creek Allotment and 97 percent in the Horse Heaven Allotment would go into private ownership. Livestock use would allow about 67 percent of potential elk use to occur on elk winter range (Skovlin et al. 1968).

Additional new fence construction proposed for livestock management may not create a significant problem. Further analysis will occur through the environmental assessment (EA) process at the project level.

Proposed brush control for livestock management generally does not appear significant. However, at least one sage grouse strutting ground and 250 acres of associated potential nesting habitat would be adversely impacted. Though not significant from a resource area perspective, it would be significant to the continued existence of sage grouse in that geographic area. About 2 percent of elk winter/spring range may benefit. Further analysis will occur through the EA process at the project level.

The effects of proposed water developments cannot be predicted at this time because, impacts, if any, would be evaluated through the environmental assessment process at the project level.

The above analysis tends to paint a potentially grim picture for wildlife habitat. Current management philosophy, however, is fairly well balanced from a multiple-use perspective. Wildlife is generally accommodated to the extent possible.

Management philosophy (and priorities) could easily change every few years. Regardless of whether wildlife habitat had a high or low priority, a coherent long-term habitat management scheme would not be practical. In the absence of an overriding management framework, a considerable amount of time would be spent dealing with day-to-day crises rather than managing to meet long-term goals.

Conclusion: No major habitat quality changes are predicted. Quality would remain less than adequate on an estimated 37 percent of elk winter/spring range, 65 percent of deer winter/spring range, and about 47 percent of antelope and sage grouse seasonal ranges.

Given the lack of significant habitat improvement, no major wildlife population changes attributable to management actions are predicted.

No significant change in nongame habitat quality is predicted.

Impacts to Fisheries Habitat

Fisheries and riparian habitat would remain stable on stream sections presently in good condition while sections in poorer condition would continue to decline. Sevenmile Creek, a tributary to the Salmon River south of Salmon, would continue to cause a serious impact to the spring steelhead fishery in the Salmon River. Large amounts of silt could enter the Salmon River from Sevenmile Creek, resulting in the total elimination of the spring fishery from Sevenmile Creek downstream. This could have a significant economic impact on the Salmon community when the fishery was lost.

Fisheries habitat in small, unclassified, low gradient streams would continue to decline in condition due to continued livestock grazing at existing levels. Larger streams or small streams with high gradients would remain in their present condition.

Conclusion: Management actions would continue to harm fisheries habitat both on public and private lands.

Impacts to Water Quality, Watershed, and Soils

Under this alternative, an overall gradual decline in water quality and watershed condition would occur. Some of the reduction would result from present livestock grazing practices and some from timber harvest activities. Some watersheds would incur no adverse impacts to watershed condition or riparian quality, while others would experience an accelerated degradation of condition (Appendix D-1).

Most highly erosive soils in the area are located on low elevation early spring range. These soils are most susceptible to damage during the very times they are used by livestock. There would continue to be 20,100 acres of fair and poor condition range on these soils. The loss of native perennial grasses and forbs and the increase in invader species and annual grasses and forbs would further impact the watershed.

Soil erosion trends would continue to reflect range condition. The 59,399 acres of highly erosive soils would continue to present a hazard and would be monitored. These would include the 5,028 acres of bentonite soils in downward trend in some areas. A total of 1,849 acres of range improvements and 35 acres of wildlife improvements would cause soil surface disturbance and decreased vegetation cover over the short term. The 7 acres of rangeland improvements and 5 acres of wildlife improvements would increase soil compaction around watering devices and along fences and would decrease soil tilth and porosity. Table 4-2 represents a detailed breakdown of the acreages.

Land transfers through the Desert Land Act would involve a maximum of 1,270 acres of Class III or better soils. Adverse impacts associated with the transfer of public land under the Desert Land Act may include the potential for accelerating soil erosion and stream sedimentation and the loss of public resource values, primarily riparian areas.

Timber sale activity would increase sedimentation and decrease water quality in those watersheds where timber harvest activities occurred. Most sediment would result from building roads. Basic erosion rates for standard practices in tons per square mile per year are shown in Table 4-1 (USFS, Region 1-4, 1981).

TABLE 4-1
EROSION RATES FOR STANDARD LOGGING PRACTICES

	YEAR						
Practice	1	2	3	4	5	6	6+
Roads 1/	67,500	18,000	5,000	5,000	5,000	5,000	5,000
Logging 2/	340	180	140	90	40	10	0

1/ Road area includes horizontal distance from toe of fill to top of cut. Standard 16-foot road is assumed to have a sustained 5 to 7 percent grade, consist of balanced construction (material from cut slope used to make the fill slope), insloped with a ditch, have a native surface, have cross drains at 500-foot spacing constructed in granitic materials on a 50 percent side slope, and be maintained annually.

2/ Standard logging system is clearcut with tractor yarding. Temporary roads and skid trails are assumed to be cross ditched and seeded as part of standard logging practice.

TABLE 4-2
SURFACE AREA DISTURBANCE BY IMPROVEMENT

IMPROVEMENT	ACRES DISTURBED PER UNIT	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E	Alt. F	Alt. G
Range								
Brush Control	1.0	1,550	24,606	7,490	14,018	22,718	22,718	22,718
Seeding	1.0	275	13,438	5,400	17,518	4,425	4,425	4,425
Springs	.35	3.5	17.5	11	10.5	11.2	11.2	11.2
Pipelines	1.0/mile	8	81	58	41	50	50	50
Reservoirs	3.45	3.5	31.5	38.5	24.5	14	14	14
Fences	1.0/mile	9	101	42	56	63	63	63
Short-Term		1,849	38,275	13,039.5	31,668	27,281.2	27,281.2	27,281.2
Long-Term (Spr. & Reservoir)		7	49.0	49.5	35.0	25.2	25.2	25.2
Wildlife								
Prescribed Burns	1.0	0	5,500	7,360	0	3,700	7,360	7,360
Pipelines	1.0/mile	0	3	6	1	2	6	6
Fences	1.0/mile	30	78	159	41	102	159	159
Guzzlers	1.2	4.8	14.4	21.6	6	10.8	21.6	21.6
Short-Term		34.8	5,595.4	7,546.6	48	3,814.8	7,546.6	7,546.6
Long-Term (Guzzlers)		4.8	14.4	21.6	6	10.8	21.6	21.6

Roads would be closed following timber harvesting unless they were needed for timber and fire management. Management activities requiring road usage would occur only when roads would not be damaged. This would result in a 75 percent reduction in the basic erosion rate (Megahan and Kidd 1972).

All of the preceding figures are broad estimates of how real systems may respond. The basic erosion rates listed in the table do not take into account the potential road construction sediment that would enter or become available to perennial stream systems. Factors affecting sediment derived from logging activities entering perennial stream systems would include:

1. Texture of eroded material
2. Slope gradient
3. Surface roughness
4. Percent ground cover
5. Slope shape
6. Delivery distance
7. Available water (Water Resources Evaluation of Non-Point Silvicultural Sources, Chapter 4)

Water yield would increase in those watersheds that have been logged. This would result in higher peak flows during spring runoff and scouring of perennial stream channels. Groundwater recharge would be reduced, with water output from some springs being reduced by 50 to 70 percent (personal communication with local rancher Ivan Jones 1984).

Conclusion: Soils, water quality, and watershed condition would decline primarily because of timber activities. While localized areas of rangeland improvement or degradation would exist, overall watershed and soil condition on rangelands would not change.

Impacts to Riparian Habitat

Most riparian areas are in an unsatisfactory, static condition because of many years of heavy livestock grazing pressure. Some areas are experiencing even further degradation. Two examples are the Beer Can Flats area in the Freeman Creek watershed and the Cow Creek perennial stream riparian area. Present condition or further degradation would result from:

1. Elimination or partial elimination of riparian areas by channel degradation and lowering of the water table

2. Replacement of riparian vegetation with more zeric (adapted to a dry environment) plant species; change, reduction, or elimination of riparian vegetation

3. Change in the structure of the water column and the channel it flows in

4. Channel widening from hoof-caused bank sloughing and later erosion by water

5. High coliform bacteria counts

6. Excessive silt (sediment) in the channel from bank and upland erosion

7. Higher stream temperatures resulting from a lack of sufficient woody streamside cover (Skovlin 1981).

Most streams and riparian areas would continue to be severely impacted by livestock. Utilization would be excessive, with values of 70 to 90 percent being common. Riparian areas adjacent to pasture or allotment boundaries would often be reduced to mineral soil, as would key shading areas. The present composition of native perennial grasses and forbs would remain low. A reduction in woody vegetation over natural conditions would continue to take place in some riparian areas. Cumulatively, these factors would reduce the sediment filtering capacities of riparian areas during thunderstorm and snowmelt events and result in lower water quality.

Conclusion: Continuing present levels of livestock use would result in a continued decline in riparian habitat.

Impacts to Recreation Uses and Visual Quality

Adoption of the current off-road vehicle (ORV), visual resource management (VRM) and recreation opportunity spectrum (ROS) inventories as management goals would maintain current recreation use levels and opportunities, although user preferences could change. Motorized use would continue to occur randomly throughout the resource area and remain at nearly the current level. Use would be relatively light in most areas, with heavier activity occurring along the Salmon River.

Recreation opportunities would remain secure on lands retained in federal ownership. Public recreation uses would be eliminated on lands that were disposed of, unless they were transferred to another public agency. The proposed disposals would have a low impact on recreation use because most of the land parcels are small and inaccessible to public use.

The recreation-oriented mineral entry withdrawals would continue to include 0.2 percent (923 acres) of the planning area, even through 640.14 acres of this is no longer required for recreation program management.

Mining and mineral leasing activities could impact dispersed recreation by disrupting the natural appearance of the landscape and shifting the recreation opportunity setting from the more natural appearing to the rural type. However, since the extent, location, and nature of future operations is not known, the actual impacts cannot be predicted. In general, mineral leasing impacts would be lessened because of restrictions and stipulations on leasing activities.

The removal of timber and associated activities such as road building would have a tendency to shift recreation opportunities to less primitive forms. Hunting would increase with better vehicle access, as would motorized recreation and wood gathering.

Leaving three developed recreation sites open to appropriation would place an estimated $70,000 of improvements (replacement cost) at risk. Because no additional recreation site development work would be undertaken, BLM would not provide any of the recreation facility needs (picnicking and camping) identified for Lemhi County in the 1983 Statewide Comprehensive Outdoor Recreation Plan.

The interim VRM Class I management of the Salmon River Special Recreation Management Area and Eighteenmile Wilderness Study Area (WSA) would virtually eliminate all surface disturbing activities except those absolutely required for public safety until Congress made a final decision on the wilderness and wild and scenic river study issues. The level of change to the existing landscape should remain very low (Appendix F).

Conclusion: Continuation of the existing situation would be largely neutral in its impact on recreation resources and visual quality. No attempt would be made to meet the demand for recreational uses (camping and picnicking) identified for Lemhi County.

Impacts to Wilderness Values

None of the wilderness values on 24,922 acres would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated in the next five years.

In the long term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. Prospecting for phosphate is expected to occur on 1,920 acres, with development of a mine anticipated if an economically feasible discovery is made. Known deposits occur just north of the WSA. Two miles of road construction would probably be associated with the phosphate area. The wilderness value of naturalness would be lost on the 1,920 acres. The perception of naturalness would be essentially lost over an additional 200-acre area because the area of phosphate prospecting could be seen.

Renewed mining of gypsum in Clear Creek would impact the perception of naturalness on 300 acres adjacent to the mine. One mile of road construction is anticipated.

For the purpose of this analysis, it is assumed that two discoveries and lode claims would be made between Dry Canyon and Horse Thief Creek. Based on similar developments in the area, construction of one mile of road and 50 acres of surface disturbance is expected.

The wilderness value of naturalness would be adversely impacted on a total of 2,470 acres located between Dry Canyon and Horse Thief Creek.

In addition to naturalness, activities associated with mineral development would adversely impact the wilderness value of solitude. Sights and sounds from traffic and construction related to the above development would lower the quality of solitude on 2,470 acres.

Sights and sounds from recreational off-road vehicle (ORV) use would have an adverse impact on solitude. However, this impact is expected to be negligible compared to mining activities since ORV use is estimated to be less than 25 visitor days annually (estimate by BLM personnel) and is expected to remain below 50 visitor days annually for the next 10 years.

Conclusion: Wilderness values would be adversely affected on 10 percent (2,470 acres) of the WSA. Wilderness values on 90 percent (22,452 acres) would be subject to loss but no adverse activities are anticipated.

Impacts to Cultural Resources

General impacts to cultural resource sites consist of any change from the original condition. Changes in the physical structure result in the loss of information contained in the sites. Since cultural resources are finite and non-renewable, such changes are permanent, irreversible, and cumulative.

Activities that could have impacts on cultural resource sites may be viewed as being of two different types-localized and dispersed. Localized activities are those that occur at a specific, predetermined location. These might include range project developments, realty actions, or mining claim work. Potential impacts from these types of activities are generally mitigated by a standard operating procedure requiring a cultural resource inventory prior to any ground disturbance. Therefore, effects to cultural resources from localized activities should be minimal.

Dispersed activities, such as livestock trampling, off-road vehicle use, recreation use, and those causing erosion, are generalized wide-spread activities whose effects cannot be readily mitigated. Livestock trampling can cause the most damage on cultural resource sites located at troughs, water sources used by livestock, and livestock congregation areas. As long as livestock are not concentrated on cultural sites for long time periods, trampling impacts should be minimized. ORV use, general recreation use, and natural and man-caused surface and streambank soil erosion would continue to have some effect on cultural resource sites.

The greatest threat to the Lemhi Area cultural resources would continue to be vandalism, illegal site excavation and artifact collection, and unauthorized surface disturbance. These unmanaged and unauthorized activities do not comply with the Archaeological Resources Protection Act of 1979 or with other federal and state cultural resource laws.

Another activity which could have adverse effects on cultural resources is the transfer from federal ownership of certain lands which have great historical and cultural significance for the Shoshone-Bannock Tribes and the Lemhi Indians. These lands may have burials or other sacred sites on them not readily apparent from a surface cultural inventory.

Cultural resource uses should vary little for each alternative. Conversely, public land allocations for cultural resource site protection should not significantly affect other resource activities. Fencing springs to protect cultural resource sites from livestock trampling would not reduce available livestock forage or water, as water would be piped away from the source. This could mitigate potential resource conflicts.

Continuing the existing situation would result in a continued downward trend in the condition of both known and unidentified cultural resource sites. Artifact damage and displacement resulting from surface erosion and cattle trampling, the most common types of impacts, would continue to occur at roughly the present rates. Recreation associated impacts, such as off-road vehicle damage and artifact collecting, would also be expected to continue at present rates.

Under this alternative, a management plan would be written for the 40-acre Chief Tendoy Indian Cemetery. This plan would have beneficial effects on the Native American burials located within the withdrawn 40 acres, including the burial sites presently threatened by unauthorized agricultural development. However, burials outside the 40 acres would still be subject to a number of impacts, including unauthorized agricultural trespass and unauthorized road building.

Conclusion: Continuing the existing situation would result in a continued downward trend in the condition of both known and unidentified cultural resource sites. This would be significant for some sites. The Chief Tendoy Cemetery would be protected by a special management plan.

Impacts to Economic Factors

Crop Agriculture

With this alternative there would be 1,270 acres of agricultural development. Based on past experiences, it is assumed that this development would occur in a gradual manner throughout the 20-year life of the RMP. The BLM's Agricultural Development Economic Computer Model was used to estimate sales from crop production in this alternative. A 7-year rotation, which includes planting barley the first 2 years as a nurse crop for alfalfa and then 5 years of alfalfa production, was used in this analysis. This resulted in an average per acre sales of $203.31 (see appendix for a complete description of the process used to arrive at this amount). This means that the total sales from 1,270 acres would be $258,204.

Utilizing the IMPLAN income per $1 of sales coefficient, the total direct income (income within the crop agriculture sector of the economy) resulting from crop agriculture is $12,084. The total income (which accounts for interindustry interactions and household spending) associated with this level of development would be $25,211. This is calculated using the IMPLAN personal income multipliers (see Appendix H for an example of these calculations). The direct income generated represents 4 percent of the 1982 crop agriculture income. The total income generated represents less than 0.1 percent of total Lemhi County income in 1982.

The direct gain in employment was estimated using the IMPLAN jobs per $1 million in sales coefficient. The estimated gain in direct jobs is 2.7, which is 6 percent of 1982 crop agriculture employment. The total gain in jobs, estimated using the IMPLAN employment multipliers, is 4.7. This is 0.1 percent of total 1982 Lemhi County employment (see Appendix H for an example of these calculations).

Livestock (Meat Animals)

The initial stocking level with this alternative would be the same as the existing situation. Thus, there would be no impact on livestock income and employment in the short term. Over time, AUMs would be gained, so that by the end of 20 years there would be 1,092 more AUM's than are currently being used. Ranch budgets prepared for grazing environmental impact statement in nearby areas were used to determine the level of sales generated per AUM (USDI,BLM 1983; USDI,BLM 1981; USDI,BLM 1981). This results in a sales per AUM figure of $21.70. Total sales by the end of 20 years would increase by $23,696, which would convert to direct income of $661 (using the IMPLAN income per $1 sales coefficients). This would represent less than 0.1 percent of current permittees' personal income. Total income (calculated using the IMPLAN personal income multipliers) would be $4,192, which is less than 0.1 percent of total Lemhi County personal income (see the appendix for an example of these calculations).

The direct gain in employment would be 0.2 jobs. This is based on the IMPLAN jobs per $1 million in sales coefficient. This is less than 0.1 percent of 1982 permittees' employment. Total employment, calculated using the IMPLAN employment multiplier, would be 0.4 jobs with this alternative. This is less than 0.1 percent of 1982 Lemhi County employment (see the appendix for an example of these calculations).

Although actual use would increase in the long term with this alternative, active preference would decline by 10,265 AUMs (if active preference is adjusted to match up with actual use). This would translate into a loss of capital value of between $579,117 and $2,566,250. See Appendix H for an example of these calculations.

Recreation

Although recreation is a fairly significant segment of the Lemhi County economy (see Chapter 3, Economic Conditions), the various alternatives proposed in this RMP are not expected to impact visitor use in any measurable way. Thus, no changes from the existing situation are predicted.

Lumber and Wood Products

The present allowable cut (1.07 million board feet per year) is expected to remain constant through all alternatives in this RMP. Thus, no changes from the existing situation are predicted.

Management Costs

Management costs would not change dramatically with this alternative. Activity planning costs of $24,000 and project development costs of $122,100 would be incurred with this alternative. All of the activity planning costs and $6,000 of the project costs are associated with cultural resources. The remainder of the project costs are in support of the range program.

Revenue Generation

Over the 20-year life of this RMP there would be approximately $553,500 in revenues generated on an annual basis. This is roughly 14 percent lower than the revenues generated in fiscal year 1984. This is primarily due to the fact that 2.7 million board feet of timber was sold that year versus the 1.07 million board feet projected on an annual basis over time. Table 4-3 shows the source of the revenues generated under this alternative.

TABLE 4-3
REVENUES GENERATED
Alternative A

Category	Amount
Grazing Fees	$ 71,700
Mineral Leasing	410,000
Land Sales	36,100
Timber Sales	35,200
Recreation Fees	500
TOTAL	$553,500

Receipts to State and Local Governments

The average annual receipts to state and local governments would be $482,700, which is 1 percent greater than was received in fiscal year 1984. This is due largely to the fact that there was a 5 percent reduction in payments in-lieu-of-taxes in fiscal year 1984, while the values estimated here are the total estimated payment (with no reductions). Table 4-4 shows the estimated receipts under this alternative.

TABLE 4-4
RECEIPTS RECEIVED
Alternative A

Type of Receipt	State of Idaho	Lemhi County	Total
In-Lieu-of-Taxes	$ 0	$265,100	$265,100
Grazing Fees	0	9,000	9,000
Mineral Royalties	184,500	20,500	205,000
Land Sales	1,800	0	1,800
Timber Sales	1,800	0	1,800
TOTAL	$ 188,100	$294,600	$482,700

This level of revenues for Lemhi County would represent 19 percent of the county's fiscal year 1984 total revenues.

Conclusion: This alternative would have little economic impact on Lemhi County. The total increases in income and employment by the end of 20 years would be $29,400 and 5.1 jobs. This would represent less than 0.1 percent of the 1982 Lemhi County total personal income and 0.2 percent of the total 1982 Lemhi County employment. The most serious impact associated with this alternative would be the loss of capital value, which could be as high as $2.6 million. Total revenues generated would decline slightly to $553,500, while receipts received by state and local governments would increase slightly to $482,700.

ALTERNATIVE B

Impacts from Lands Actions

The classification for retention under the Classification and Multiple Use Act would be canceled throughout the planning area. Under this alternative, 3,419 acres would be identified for potential transfer from Federal ownership. The remainder of the public land in the planning area would be retained. The lands identified for potential disposal have met screening criteria (see pages 39-41 of the Draft Resource Management Plan) that nearly eliminate the likelihood of significant adverse environmental impacts. Therefore, no significant impact is expected from cancellation of the retention classification.

Impacts to Energy and Mineral Availability

Compared to Alternative A, this alternative would result in a 5 percent decrease in acres available for fluid mineral leasing with standard stipulations, a 10 percent decrease in lands with seasonal occupancy restrictions, and a 66 percent increase in lands having the no surface occupancy restriction for fluid mineral leasing. Approximately 14,796 acres would be closed to fluid mineral leasing by the recommendation for wilderness designation of a portion of the Eighteenmile Wilderness Study Area. An additional 800 acres would be closed to geothermal leasing (Sharkey Hot Springs area) for recreational development. For solid mineral leasing there would be a decrease of approximately 6 percent in lands available for leasing with standard stipulations, a 10 percent decrease in lands available with seasonal occupancy restrictions, and a 112 percent increase in lands closed to solid mineral leasing. There would be a 0.3 percent decrease in lands open to mineral location. This represents a 70 percent increase in lands withdrawn from location when compared to Alternative A.

There would be approximately a 9 percent decrease in lands available for mineral material disposals. This is an increase of approximately 144 percent in lands closed to mineral material disposal compared to Alternative A. Less than 1 percent of the RMP area would be withdrawn from location and about 16 percent would be closed to mineral material disposal.

The seasonal occupancy restrictions on leasing would not significantly limit mineral exploration and development opportunities. However, under the no surface occupancy restriction, up to 13,556 acres would be beyond the practical reach of directional drilling for oil and gas. This would effectively remove this acreage from development, even though it would be available for leasing. This represents approximately 3 percent of the prospectively valuable oil and gas lands in the planning area. Approximately 14,796 acres (3 percent of the RMP area) would be closed to oil and gas leasing by the recommendation for wilderness designation of a portion of the Eighteenmile WSA.

Geothermal leasing would be restricted with the same no surface occupancy restrictions as oil and gas leasing. A total of 15,596 acres, or 3.32 percent, (including 4,320 acres, or 10.4 percent of the lands that are prospectively valuable for geothermal energy) that would be closed to leasing and development. Both the no surface occupancy and the no lease restrictions would significantly limit the availability of the affected lands for exploration and development of fluid mineral resources.

Approximately 10 percent of the RMP area would be closed to solid mineral leasing, including 2,340 acres having potential for phosphate development. This represents about 45.7 percent of the reported phosphate lands within the RMP area (Oberlindacher and Hovland).

The potential for development of locatable minerals is moderate on 12 percent of the lands that would be withdrawn under this alternative. The potential on the remaining 88 percent of the the withdrawn lands is low. The withdrawn lands would be about 3 percent of the total planning area and approximately 1 percent of the moderate potential lands within the RMP area.

The potential for development of locatable minerals is moderate in 72 percent of the lands that would be withdrawn under this alternative. The withdrawn lands represent about 3 percent of the total planning area and approximately 1 percent of the lands having moderate potential for the discovery of locatable minerals within the resource area. There appears to have been no significant exploration activity on most of the lands that would be withdrawn.

Because of the very widespread occurrence of most mineral materials within the planning area, the closure of approximately 16 percent of the lands to mineral material disposals would not have any significant adverse impacts. The areas that would be closed are generally small, and material can be obtained in the immediate vicinity of most of the closures. Large blocks that would be closed, like the Eighteenmile WSA, are far removed from areas where mineral materials are used and have not been utilized as a source of mineral materials in the past.

Conclusion: There would be a slightly adverse impact on the availability of lands for fluid mineral and mineral materials exploration and development. A moderately adverse impact on the availability of lands thought to be valuable for phosphate exploration and development would occur. There would be a slightly adverse impact on the availability of lands for the exploration and development of other non-energy leasable minerals. Finally, there would be a slightly adverse impact on the availability of lands for the exploration and development of locatable minerals.

Impacts to Timber Yield and Availability

The present sustained yield allowable cut for the planning area is 10.71 million board feet per decade. This harvest level must be maintained through Fiscal Year 1988, when a new 10-year allowable cut will be computed. The set-asides in this alternative would reduce the available commercial forest and base. Multiple-use restrictions would further reduce potential timber production and yield. These set-asides and restrictions would enter into the new allowable cut computation in 1988 and would decrease the harvest level accordingly.

Harvest practices such as clearcut, shelterwood, and selective cut would influence vegetation cover on approximately 300 acres each year. These harvest activities would benefit forest resources by regenerating the stand, reducing insects and disease through removal of infected trees, and improving growth and production of residual trees.

Forest development practices such as thinning, planting, and use of herbicides would be used on available commercial forest lands. These techniques would improve stocking levels and growth rates and decrease insect and disease problems.

Under this alternative, 1,229 acres of suitable commercial forest land would be set aside from the timber production base to ensure protection of recreation values within the planning area. Another 1,354 acres would be set aside for protection of designated wilderness. Approximately 5,514 acres of woodland would be closed to woodland product sales within these same areas to help preserve the visual quality of the existing landscape. The anticipated impacts of these set-asides and closures are shown in Table 4-5.

TABLE 4-5
SET-ASIDES AND CLOSURES

	Suitable CFL[1] Set-Aside		Woodland Closures		Loss in Harvestable Timber Yield
Set-Aside	Acres	% of Total Suitable CFL	Acres	% of Total Woodland	MBF[2]/Year
Recreation Values	1,229	4.0	2,237	8.5	99 MBF/Year
Wilderness	1,354	4.5	3,277	12.5	109 MBF/Year
TOTALS	2,583	8.5	5,514	21.0	208 MBF/Year

1 Commercial Forest Land
2 Thousand Board Feet

Of the 27,726 acres of available commercial forest land, 2,275 acres would receive restricted management to reduce adverse impacts to crucial elk winter range. A 20 percent reduction in harvestable timber yield would be expected as a result of these measures. This would amount to an estimated loss of an additional 37,000 board feet/year.

Intensive management of the 27,726 acres of available commercial forest land would enable the planning area to support its present sustained yield allowable cut of 10.71 million board feet per decade. Management of the 20,755 acres of available woodland would increase the production of non-sawtimber products such as firewood and Christmas trees.

Conclusion: The adverse impact on timber yield and on the availability of commercial forest lands and woodlands would be moderately significant under this alternative. A total of 8 1/2 percent of the suitable commercial forest land in the planning area would be unavailable for timber harvest. Also, 21 percent of the woodland within the planning area would be closed to woodland product sales. An additional 8 percent of the available commercial forest land would be subject to harvesting and management restrictions to protect crucial elk winter range. Loss in harvestable timber yield as a result of these set-asides and restrictions would total approximately 245,000 board feet/year.

Impacts to Livestock Grazing

Under this alternative the initial stocking level would be 63,898 AUMs. This equals the current active preference and is 16 percent above the 5-year average use. The long-term stocking level would be 70,836 AUMs. This would represent an 11 percent increase over the initial stocking level and a 32 percent increase over 5-year average use. Approximately 2,776 acres would be open for possible transfer. This would result in the loss of 333 AUMs. Fourteen allotments would be affected. Five allotments could be eliminated and nine others would be slightly reduced.

Conclusion: Under this alternative, the short-term 16 percent increase relative to the 5-year average would be significantly beneficial to livestock operations. The long-term 32 percent increase would be highly beneficial.

Impacts to Range Vegetation

There would be approximately 24,600 acres of brush control, 13,438 acres of seedings, 59 water developments, and 101 miles of fencing. Brush control would change 24,600 acres of good and fair ecological condition range to good. The seedings would change 13,438 acres of fair and poor ecological condition range to disturbed condition.

The long-term ecological condition is expected to be 1 percent excellent, 50 percent good, 36 percent fair, 0 percent poor, 10 percent unmapped, and 3 percent disturbed.

The long-term trend is expected to be 77 percent static and 23 percent downward. Brush control and seeded areas would be expected to stabilize and remain static in trend. The downward trend areas would continue to decline as undesirable plant species density continued to increase. Range improvements and intensive management, including appropriate season of use and livestock distribution changes, would not allow for maintaining the long-term ecological range condition because the long-term stocking rate is too high.

Conclusion: Good ecological condition range would decrease from 61 to 50 percent because of high long-term stocking rates, resulting in a significant adverse impact.

Impacts to Crucial Wildlife Habitats

The amount of fair and poor ecological condition range and unsatisfactory wildlife habitat should increase substantially under this alternative. Implicit in reduced ecological condition is further depletion of the grass/forb component.

Reduced vegetation diversity would adversely affect wildlife cover, forage, and other habitat values (Cottam and Stewart 1940; Gallizioli 1976; Mackie 1978).

Much needed forage diversity for big game would decline (Dasmann 1971; Yoakum 1980; Carpenter and Walmo 1981; Nelson and Leege 1982). Poorer habitat conditions for sage grouse would also result (Savage 1969; Klebenow 1981; Autenrieth et al. 1982). Niche diversity would generally decline, resulting in less diversity and abundance for nongame species (Shelford 1963; Carson et al. 1978; Geier and Best 1980; Dealey et al. 1981; Hanley and Page 1982). Poorer ecological condition would also have an adverse impact on long-term habitat health and stability (Johnsgard and Pickard 1957; Daubenmire 1979; Watt 1972; Vogl 1978).

The proposed stocking level of livestock would intensify competition with deer because of lowered ecological condition and probable removal of virtually all herbaceous material prior to deer arriving on their winter ranges (Moen 1978; Vavra et al. 1981). Livestock competition with, and disturbance of, antelope would also be intensified (Beasom et al. 1981; McNay and O'Gara 1981).

A uniform forage utilization goal of 50 percent by cattle could result in about a 55 percent reduction in elk use (Skovlin et al. 1968). The inverse relationship between level of cattle use and elk habitat suitability and use is well documented (Hudson et al. 1976; Gruell et al. 1978; Knowles and Campbell 1981; Skovlin et al. 1983).

A 50 percent utilization level (by weight) equates to roughly an 80 percent to 90 percent plant height reduction of bluebunch wheatgrass and Idaho fescue (Alden and Francis 1984). Locating forage after substantial snowfall could be very difficult for elk, given the reduction in plant height (McLean and Williams 1981).

An additional 101 miles of new fence construction would raise fence density from .49 to .62 mile per square mile. The result would be a 26 percent increase in potential hazard levels (Oakley 1973; Papez 1976) and movement problems (Urness 1976; Adams 1982; Gross et al. 1983) for big game animals. The effect on overall health or population levels of various species would certainly be adverse but cannot be quantified.

Brush control proposed for livestock management would effectively eliminate 4 percent of deer crucial winter range, 8 percent antelope winter range, and 17 percent of sage grouse winter/nesting habitat. Eleven percent of elk winter/spring range would theoretically benefit from brush control. However, potential benefits would be off-set by the proposed high stocking levels for livestock.

The effects of proposed water developments cannot be predicted at this time. These developments would be evaluated through the environmental assessment process at the project level.

Twenty-four percent of the water deficient acreage would be improved through installation of five 500-gallon guzzlers. More efficient range use by antelope (Copeland 1980), sage grouse, and nongame species is anticipated.

About 59 percent of fences known or suspected of creating a hazard or movement problem for big game would be corrected. Though not quantifiable, fewer deaths, fewer injuries, and more efficient range use should result.

Timber management restrictions would guarantee preservation of escape and thermal cover qualities of 45 percent of the commercial timber acreage associated with crucial elk winter range (Ralphs 1981).

No-surface-occupancy restrictions would preserve some of the physical characteristics of about 76 percent of the multiple species crucial areas. These restrictions would also help protect 38 percent of known raptor nest sites, 41 percent of known sage grouse strutting grounds, 57 percent of crucial elk winter range, and 100 percent of known burrowing owl habitat.

Mineral activity seasonal use restrictions on all other important seasonal ranges would allow optimal habitat utilization by various species, preserve traditional dispersion patterns, and minimize potentially damaging effects of human induced stress (Wynne-Edwards 1972; Selye 1950).

The following percentages of combined state/private land needed to preserve crucial habitats would come into federal ownership: antelope migration corridor, 80 percent, and antelope/deer crucial winter range, 100 percent. However, 43 percent of deer, 27 percent of antelope, and 25 percent of sage grouse crucial range immediately west of Leadore would be transferred into private ownership.

Approximately 21 percent of unsatisfactory elk range would be improved to satisfactory condition as a result of prescribed burning in areas determined unsuitable for livestock. However, with livestock being stocked at a 4.8 acre per AUM rate, any additional use (in the form of reservations for big game) would be of questionable value.

Table 4-6 shows projected habitat quality decline and percent reductions of various big game species. The remaining big game populations would possibly survive even with no formal forage reservation.

TABLE 4-6
WILDLIFE LOSSES

Species/Habitat	Estimated Decrease in Population Numbers or Habitat Quality (percent)
Deer Population	35
Elk Population	55
Antelope Population	22
Bighorn Sheep Population	100
Deer, Antelope, & Sage Grouse Habitat	21
Elk Habitat	39
Nongame Habitat	51

Acceptance of this alternative could ultimately be very damaging to wildlife resources. Long-term, major vegetation and ecosystem simplification would occur. Much of the resultant vegetation would consist of less desirable invader species.

Conclusion: Quality of deer fall/winter/spring range could decline by about 30 to 40 percent, elk and bighorn sheep winter/spring range by 50 to 60 percent, and sage grouse and antelope seasonal ranges by about 20 to 25 percent.

Significant population declines--2,600 deer (-35%), 1,084 elk (-55%), 500 antelope (-22%), and 875 sage grouse (-25%)--could occur.

Bighorn sheep could be eliminated. The bighorn population would probably not exceed about 100 to 150 animals, which means the herd could easily be reduced to a nonviable level when this alternative was fully implemented.

No significant change in forested nongame habitat quality is foreseen. Nonforested nongame habitat quality could decline by about 50 percent.

Impacts to Fisheries Habitat

This alternative would increase grazing by 11 to 32 percent overall and would have the most serious vegetation impacts of any alternative considered.

If this alternative were implemented, fisheries habitat in all unclassified streams where grazing was increased could be expected to deteriorate at least one condition class.

Streams in the Salmon River corridor could also be expected to decline depending on the increase in actual livestock use. Long-term active use change in the river allotments range from a decrease of 12 percent in Deriar Creek to an increase of 562 percent in Dummy Creek. From a water quality standpoint for waters entering the Salmon River directly from these tributary streams, the impacts can only be considered negative.

Conclusion: Serious adverse impacts resulting from livestock grazing would affect the fisheries habitat on public land as well as fisheries habitat associated with private lands in downstream areas.

Impacts to Water Quality, Watershed, and Soils

Areas presently in unsatisfactory watershed condition typically receive little precipitation (7 to 11 inches per year). Low rainfall, in conjunction with soils that are not capable of producing large amounts of forage and have historically been mismanaged, means that these areas would be the last to respond to management, if indeed they did at all. To expect significant improvements in areas in 15 to 20 years with grazing systems and improvements that are the product of 50 to 75 years of mismanagement in low precipitation zones is unrealistic.

Soil response to increased stocking levels in allotments with highly erosive soils would result in reduced cover and accelerated erosion on 59,399 acres. Extremely susceptible are 5,028 acres of bentonite badlands within three allotments: Hot Springs (20 percent of the allotment), Badger Springs (21 percent of the allotment), and South Carmen Creek (7 percent of the allotment).

The 38,275 acres of rangeland improvements and 5,595 acres of wildlife improvements would result in increased soil surface disturbance and potential gullying around watering devices and along fences for the short term. Over the long term, 50 acres of rangeland improvements and 15 acres of wildlife improvements would increase soil compaction and bulk density and decrease vegetation cover, soil porosity, and tilth. See Table 4-2 for an acreage breakdown by improvement.

Timber sale activity would increase sedimentation and decrease water quality in those watersheds where timber harvest activities occurred. Most sediment would result from building roads. Basic erosion rates for standard practices in tons per square mile per year are shown in Table 4-1 under Alternative A. A discussion of impacts resulting from logging and road construction is presented under Alternative A.

Conclusion: An overall reduction in soil and water quality and watershed condition would occur as a result of timber harvest activities and livestock grazing.

Impacts to Riparian Habitat

Riparian areas make up only a small portion of the total land area. However, they are more productive in terms of both plant and animal species diversity and biomass per unit area than the more arid remainder of the land base.

A total of 138 acres of riparian area would be improved by total exclusion of livestock by fencing. However, a reduction in the quality of riparian zones would occur in the remainder of the area under this alternative. In order to meet livestock grazing management goals on upland sites, riparian zone vegetation would receive between 70 and 90 percent utilization. Although overall range condition would improve under this alternative, riparian areas would become "sacrifice areas" and experience further degradation.

Riparian areas would experience the following adverse impacts:

1. Higher stream temperatures resulting from a lack of sufficient woody streamside cover

2. Excessive silt (sediment) in the channel from bank and upland erosion

3. High coliform bacteria counts from upper watershed sources

4. Channel widening from hoof-caused bank sloughing and later erosion by water

5. Change in structure of the water column and the channel it flows in

6. Change to, reduction in, or elimination of vegetation

7. Total elimination of riparian areas by channel degradation and lowering of the water table

8. Gradual stream channel trenching or braiding, depending on soils and substrate composition, with concurrent replacement of riparian vegetation with more zeric plant species (Skovlin 1981).

Conclusion: Severe riparian degradation resulting from increased livestock use would occur with implementation of this alternative.

Impacts to Recreation Uses and Visual Quality

The quantity of recreational opportunities available on 18,085 acres in the three special recreation management areas (SRMAs) would be increased 160 percent. Class II visual resource management for these SRMAs would increase the acreage in this class by 108 percent. All potential surface disturbing uses of these lands would come under the Class II management guidelines, which limit the degree of visual change to that which is not noticeable to the average viewer. The level of change to the existing landscape should remain low (see Appendix F). Setting aside 656 acres of commercial forest land along the Continental Divide National Scenic Trail would ensure long-term visual quality of the trail corridor. Withdrawal of 1,820 acres from mineral entry within the Lewis and Clark National Historic Trail SRMA would reserve a minimal treadway, ensuring the continuity of the approximately 15 miles of trail on public lands.

The number of developed recreation sites would increase 28.6 percent with the construction of two new sites. These developments would help meet approximately 5 percent of the projected camping and picnicking facility needs for Lemhi County (1983 Statewide Comprehensive Outdoor Recreation Plan). All of BLM's developed facilities would be protected by mineral entry withdrawals. The cumulative effect of the recreation-oriented mineral entry withdrawals (new and existing) in this alternative would be the withdrawal of one half of one percent (2,290 acres) of the planning area.

Dispersed recreational opportunities and off-road vehicle (ORV) use would continue as in Alternative A. An ORV closure of the wilderness area following designation (14,796 acres) and the adjacent semi-primitive nonmotorized area (4,026 acres) would have no impact on ORV recreation since the area is now considered a roadless area with no ORV opportunities or existing use. Only 25 user days of ORV use are estimated to occur in the entire Eighteenmile WSA.

Recreation opportunities would remain secure on lands retained in federal ownership. Public recreation uses would be eliminated on lands that were disposed of, unless they were transferred to another public agency. The proposed disposals would have a low impact on recreation use because most of the land parcels are small and inaccessible to public use.

Mining and mineral leasing activities could impact dispersed recreation by disrupting the natural appearance of the landscape and shifting the recreation opportunity setting from the more natural appearing to the rural type. However, since the extent, location, and nature of future operations is not known, the actual impacts cannot be predicted. In general, mineral leasing impacts would be lessened because of restrictions and stipulations on leasing activities.

The removal of timber and associated activities such as road building would have a tendency to shift recreation opportunities to less primitive forms. Hunting would increase with better vehicle access, as would motorized recreation and wood gathering.

Conclusion: Existing use opportunities, particularly on the three SMRAs, would be enhanced. An increase of 28.6 percent in developed recreation sites would meet 5 percent of Lemhi County's camping and picnicking needs. The new sites along the Salmon River would be especially beneficial in meeting recreation needs. Wilderness designation's impact on ORV use would be insignificant.

Impacts to Wilderness Values

None of the wilderness values on 10,126 acres would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated for the next five years.

In the long-term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. However, management of 4,026 acres as roadless would help to retain wilderness values on a portion of the area. This acreage would be open to mineral exploration, but operating plans and special stipulations regarding road construction, siting, and rehabilitation would be written to minimize the impacts of mineral activity.

Prospecting for phosphate is expected to occur on 700 acres, with development of a mine being likely if an economically feasible discovery was made. Known deposits occur just north of the WSA. Two miles of road construction would probably be associated with the phosphate area. The wilderness value of naturalness would be lost on the 700 acres. The perception of naturalness would be essentially lost over an additional 200-acre area because the area of phosphate prospecting could be seen.

Renewed mining of gypsum in Clear Creek would impact the perception of naturalness on 300 acres adjacent to the mine. One mile of road construction is anticipated.

For the purpose of this analysis, it is assumed that two discoveries and lode claims would be made between Dry Canyon and Horse Thief Creek. Based on similar developments in the area, construction of one mile of road and 50 acres of surface disturbance is expected.

The wilderness value of naturalness would be adversely impacted on a total of 1,200 acres between Dry Canyon and Horse Thief Creek.

In addition to naturalness, activities associated with mineral development would adversely impact the wilderness value of solitude. Sights and sounds from traffic and construction related to the above development would lower the quality of solitude on 1,200 acres.

Sights and sounds from recreational off-road vehicle (ORV) use would have an adverse impact on solitude. However, this impact is expected to be negligible compared to mining activities since ORV use is estimated to be less than 25 visitor days annually (estimate by BLM personnel), and is expected to remain below 50 visitor days annually for the next 15 to 20 years.

Wilderness values on 14,796 acres would be protected by legislative mandate. Wilderness designation would withdraw these lands from mineral entry and eliminate the potential for future mineral development. Wilderness values of naturalness and solitude would benefit from this action.

An estimated 15 visitor days annually of ORV use would be eliminated from the wilderness portion of the WSA. It is anticipated that all of this use would move to the nonwilderness portion of the WSA. Although encounters between ORV users and other recreationists are infrequent with current levels of use, the elimination of ORV use would benefit the wilderness value of solitude because visitors would not encounter or hear ORV users in the area. Beneficial effects to naturalness from elimination of ORV use would be negligible since the level of use is already quite low.

Conclusion: Wilderness values would be adversely affected on 5 percent (1,200 acres) and retained on 59 percent (14,796 acres) of the WSA. Wilderness values on 36 percent (8,926 acres) of the WSA would be subject to loss but no adverse activities are anticipated.

Impacts to Cultural Resources

Impacts to cultural resource sites from dispersed activities would show a substantial increase under Alternative B. Impacts from livestock trampling would increase in proportion to the increase in the level of grazing use. Over the long term, an increase of 32 percent is proposed for livestock stocking rates. Surface erosion is also expected to increase under Alternative B. This increase in soil erosion and stocking numbers would increase cultural resource site surface modifications and horizontal artifact displacement. Stratigraphic integrity could also be affected.

Range improvements would affect 38,275 acres, and wildlife projects are proposed for 5,595 acres. An unknown number of cultural resource sites would be affected by extensive vegetation treatment projects. Standard operating procedures should mitigate effects on identified sites. However, production pressures and budget restrictions could handicap inventory and mitigation efforts. Increases in off-road vehicle use and increases in other resource activities could also directly and indirectly impact cultural resource sites (refer to general impact section under Alternative A).

Under this alternative, lands to be transferred decrease to 3,419 acres and acreage for agricultural entry falls to zero. This decrease would have beneficial effects on cultural resources.

Five areas or complexes would be protected and actively managed through cultural resource management plans. Withdrawals of 2,100 acres of land from other uses would protect the Lewis and Clark Trail and three cultural resource sites.

Conclusion: Impacts to cultural resources from dispersed activities would increase substantially under Alternative B because of the large increase in range project acreage and grazing use levels. However, five important cultural areas would be protected.

Impacts to Economic Factors

Crop Agriculture

With this alternative there would be no agricultural development.

Livestock (Meat Animals)

The initial stocking level with this alternative would be 9,369 AUMs greater than the existing situation. Total sales would increase by $203,307, resulting in an increase in direct income of $5,672. This would be 0.3 percent of current permittees' personal income. Total income increase would be $20,649, which is less than 0.1 percent of 1982 Lemhi County personal income. Over time, additional AUMs would be gained, so that by the end of 20 years there would be 18,295 more AUMs than are currently being used. Total sales by the end of 20 years would increase by $397,002, which would convert to direct income of $11,076. This would represent 0.6 percent of current permittees' personal income. Total income increase would be $40,323, which is less than 0.1 percent of total 1982 Lemhi County income.

The initial stocking level would result in 1.3 jobs being added in the meat animal sector of the economy. This would be 0.5 percent of current permittees' employment. The total employment increase would be 3.7 jobs, which is 0.1 percent of the 1982 Lemhi County total employment. In the long term, direct employment gains would be 2.6 jobs (1.1 percent of current permittee employment), while total employment gains would be 7.4 jobs (0.3 percent of 1982 Lemhi County total employment).

Active preference would increase by 6,938 AUMs (if active preference is adjusted to match up with actual use). This would translate into a gain of capital value of between $391,419 and $1,734,500. See Appendix H for an example of the calculations made in this section.

Recreation

Although recreation is a fairly significant segment of the Lemhi County economy (see Chapter 3, Economic Conditions), the various alternatives proposed in this RMP are not expected to impact visitor use in any measurable way. Thus, no changes from the existing situation are predicted.

Lumber and Wood Products

The present allowable cut (1.07 million board feet per year) is expected to remain constant through all alternatives in this RMP. Thus, no changes from the existing situation are predicted.

Management Costs

Management costs would increase significantly with this alternative. Activity planning costs of $561,200 and project development costs of $1,705,800 would be incurred with this alternative. Table 4-7 shows these costs by type. These are total costs and would be spread over the 20 year life of the RMP.

TABLE 4-7
MANAGEMENT COSTS
Alternative B

Resource	Activity Plans	Project Dev.	Total
Range	$416,340	$1,465,290	$1,881,630
Wildlife	37,500	107,740	145,240
Recreation	25,000	20,000	45,000
Watershed	10,400	98,800	109,200
Cultural	72,000	14,000	86,000
TOTALS	$561,240	$1,705,830	$2,267,070

Revenue Generation

Over the 20-year life of this RMP there would be approximately $560,900 in revenues generated on an annual basis. This is roughly 13 percent lower than the revenues generated in fiscal year 1984. This is primarily due to the fact that 2.7 million board feet of timber was sold that year versus the 1.07 million board feet projected on an annual basis over time. Table 4-8 shows the source of the revenues generated under this alternative.

TABLE 4-8
REVENUES GENERATED
Alternative B

Category	Amount
Grazing Fees	$ 89,600
Mineral Leasing	410,000
Land Sales	25,600
Timber Sales	35,200
Recreation Fees	500
TOTAL	$560,900

Receipts to State and Local Governments

The average annual receipts to state and local governments would be $484,600, which is 2 percent greater than was received in fiscal year 1984. This is due largely to the fact that there was a 5 percent reduction in payments in-lieu-of-taxes in fiscal year 1984 while the values estimated here are the total estimated payment (with no reductions). Table 4-9 shows the estimated receipts under this alternative.

TABLE 4-9
RECEIPTS RECEIVED
Alternative B

Type of Receipt	State of Idaho	Lemhi County	Total
In-Lieu-of-Taxes	$ 0	$265,300	$265,300
Grazing Fees	0	11,200	11,200
Mineral Royalties	184,500	20,500	205,000
Land Sales	1,300	0	1,300
Timber Sales	1,800	0	1,800
TOTAL	$ 187,600	$297,000	$484,600

This level of revenues for Lemhi County would represent 19 percent of the county's fiscal year 1984 total revenues.

Conclusion: This alternative would have little economic impact on Lemhi County. The total increases in income and employment by the end of 20 years would be $40,300 and 7.4 jobs. This would represent less than 0.1 percent of the 1982 Lemhi County total personal income and 0.3 percent of the total 1982 Lemhi County employment. Capital value would be increased by as much as $1.7 million. Management costs would increase dramatically, with a total of $2.3 million being spent on activity planning and project development over the 20-year life of the RMP. Total revenues generated would decline slightly to $560,900, while receipts received by state and local governments would increase slightly to $484,600.

ALTERNATIVE C

Impacts from Lands Actions

The classification for retention under the Classification and Multiple Use Act would be canceled throughout the planning area. Under this alternative, 5,267 acres would be identified for potential transfer from federal ownership. The remainder of the public land in the planning area would be retained. The lands identified for potential disposal have met screening criteria (see pages 39-41 of the Draft Resource Management Plan) that nearly eliminate the likelihood of significant adverse environmental impacts. Therefore, no significant impact is expected from cancellation of the retention classification.

Impacts to Energy and Mineral Availability

Compared to Alternative A, this alternative would result in a 12 percent decrease in acres available for fluid mineral leasing with standard stipulations. There would be a 27 percent decrease in lands available with seasonal occupancy restrictions and a 188 percent increase in lands available only with the no surface occupancy stipulation. Approximately 29,352 acres would be closed to fluid leasing by the recommendation for wilderness designation of the Eighteenmile Wilderness Study Area (WSA) and recommendation of wild and scenic river nomination for the Salmon River corridor. An additional 800 acres (Sharkey Hot Springs area) would be withdrawn from geothermal leasing for recreational development. For solid mineral leasing, there would be a 12 percent decrease in lands available with standard stipulations, a 27 percent decrease in lands available with seasonal occupancy restrictions, and a 280 percent increase in lands closed to solid mineral leasing (approximately 25.5 percent of the RMP area).

There would be a 7 percent decrease in lands open to the location of mining claims. This represents 14 times more land withdrawn than would be withdrawn under Alternative A. There would be about 44 times more land closed to mineral material disposals (about 25 percent of the RMP area) under this alternative leaving about 75 percent of the RMP area open for mineral material disposals.

The seasonal occupancy restrictions on leasing would not significantly limit mineral exploration and development opportunities. However, under the no surface occupancy restriction, up to 35,059 acres would be beyond the practical reach of directional drilling for fluid minerals. This represents approximately 7 percent of the lands available for oil and gas leasing and 38 percent of the lands with no surface occupancy stipulation. An additional 29,352 acres would be closed to oil and gas leasing and 30,152 acres would be closed to geothermal leasing. This would make a total of 64,411 acres (13.5 percent) of land prospectively valuable for oil and gas and 65,211 acres (13.7 percent) of geothermal lands that would not be available for exploration or development.

Of the 65,211 acres of geothermal leasing lands closed to leasing, 5,365 acres are prospectively valuable. This represents approximately 13 percent of the lands prospectively valuable for geothermal resources that would not be available for exploration and development. Both the no surface occupancy and no leasing restrictions significantly limit the availability of these lands for fluid mineral exploration and development.

Included within the 25.5 percent of the RMP area closed to solid mineral leasing would be 2,930 acres having potential for phosphate development. This represents approximately 57 percent of the lands within the RMP area reported to have phosphate potential.

Alternative C

The potential for discovery of locatable minerals is moderate on 25 percent of the lands that would be withdrawn from mineral location under this alternative. The remaining 75 percent of the withdrawn lands have low potential. The withdrawn lands represent approximately 7.5 percent of the total land and 4.6 percent of the moderate potential lands within the RMP area. There does not appear to have been any significant exploration activity on most of the lands that would be withdrawn.

Mineral material occurrences are widespread throughout the RMP area. The closure of approximately 25 percent of the lands to mineral material disposals may result in longer haul distances in some portions of the RMP area, which would add to the cost of the material. With the exception of the Eighteenmile WSA and the river corridor, most of the closures are small and materials would be readily available from adjacent lands. Because of the remoteness of the Eighteenmile WSA, there has been little demand for mineral materials from this area. The only demand for material was for road surfacing of the access road to the Clear Creek gypsum mine, and that material was obtained from outside the WSA.

Significant demand for mineral materials, mainly rip-rap, undifferentiated fill, and sand and gravel, exists within the proposed Salmon River corridor. Existing sites would be preserved under this alternative but no new sites or pits would be opened. This may result in longer haul distances when material is not available near a proposed site. In the past, the state highway and county road departments have preferred to establish crusher sites, stockpile material, and then haul for up to 25 miles rather than open several smaller pits with shorter haul distances. If this use pattern continues, the existing sites should be adequate to handle the demand for the foreseeable future without the need for additional mineral material sites along the river. Additional material could be obtained, if necessary, from pits located along tributary drainages outside the Salmon River corridor.

Conclusion: There would be a moderate adverse impact on the availability of lands for solid and fluid mineral exploration and development. There would be a slightly adverse impact on the availability of lands for exploration and development for locatable minerals and mineral materials except within the Salmon River corridor, where the impact would be moderate. All forms of mineral exploration and development would be foregone in the area recommended for wilderness within the Eighteenmile WSA.

Impacts to Timber Yield and Availability

The present sustained yield allowable cut for the planning area is 10.71 million board feet per decade. This harvest level must be maintained through Fiscal Year 1988, when a new 10-year allowable cut will be computed. The set-asides in this alternative would reduce the available commercial forest and base. Multiple-use restrictions would further reduce potential timber production and yield. These set-asides and restrictions would enter into the new allowable cut computation in 1988 and would decrease the harvest level accordingly.

Harvest practices such as clearcut, shelterwood, and selective cut would influence vegetation cover on approximately 300 acres each year. These harvest activities would benefit forest resources by regenerating the stand, reducing insects and disease through removal of infected trees, and improving growth and production of residual trees.

Forest development practices such as thinning, planting, and use of herbicides would be used on available commercial forest lands. These techniques would improve stocking levels and growth rates and decrease insect and disease problems.

Under this alternative, 671 acres of suitable commercial forest land would be set aside from the timber production base to ensure protection of recreation values within the planning area. Another 2,283 acres would also be set aside for protection of designated wilderness. Approximately 6,809 acres of woodland would be closed to woodland product sales within these same areas to help preserve the visual quality of the existing landscape. The anticipated impacts of these set-asides and closures are shown in Table 4-10.

TABLE 4-10
SET-ASIDES AND CLOSURES

	Suitable CFL[1] Set-Aside		Woodland Closures		Loss in Harvestable Timber Yield MBF[2] Year
Set-Aside	Acres	% of Total Suitable CFL	Acres	% of Total Woodland	
Recreation Values	671	2.2	622	2.4	54 MBF/Year
Wilderness	2,283	7.5	6,187	23.5	184 MBF/Year
TOTALS	2,954	9.7	6,809	25.9	238 MBF/Year

[1] Commercial Forest Land

[2] Thousand Board Feet

Of the 27,355 acres of available commercial forest land, 5,156 acres would receive restricted management to reduce adverse impacts to crucial elk winter range. A 20 percent reduction in harvestable timber yield would be expected as a result of these measures.

An additional 910 acres of available commercial forest land would also be restricted to maintain the visual qualities of the existing landscape along the 1/2-mile-wide Continental Divide Trail corridor. Maintaining a Class II VRM Classification in this area would result in an 80 percent reduction in harvestable timber yield from the restricted stands.

The impacts of implementing these restrictions are shown in Table 4-11.

TABLE 4-11
MULTIPLE USE RESTRICTIONS

Restoration	Suitable CFL[1] Restricted Acres	Suitable CFL[1] Restricted % of Total Available CFL	Loss in Harvestable Timber Yield MBF[2]/Year
Elk Winter Range	5,156	18.8	83 MBF/Year
Continental Divide National Scenic Trail	910	3.3	59 MBF/Year
TOTALS	6,066	22.1	142 MBF/Year

1 Commercial Forest Land
2 Thousand Board Feet

Intensive management of the 27,355 acres of available commercial forest land would enable the planning area to support its present sustained yield allowable cut of 10.71 million board feet per decade. Management of the 19,460 acres of available woodland would increase the production of non-sawtimber products such as firewood and Christmas trees.

Conclusion: The adverse impact on timber yield and on the availability of commercial forest lands and woodland would be significant under this alternative. Nearly 10 percent of the suitable commercial forest land in the planning area would be unavailable for timber harvest. Approximately 26 percent of the woodland within the planning area would be closed to woodland product sales. Over 22 percent of the available commercial forest land would be subject to harvesting and management restrictions to protect crucial elk winter range. Loss in harvestable timber yield resulting from these set-asides and restrictions would total approximately 380,000 board feet per year.

Impacts to Livestock Grazing

The initial stocking level would be 29,291 AUMs under this alternative. This is a 44 percent reduction from the 5-year average use and a 53 percent reduction from the active preference. The long-term stocking level would be 37,064 AUMs, which is 31 percent below the 5-year average use.

A total of 4,683 acres identified for possible transfer could result in the loss of an additional 700 AUMs. Four allotments could be eliminated and 30 other allotments could be reduced.

Conclusion: Under this alternative, the short-term 44 percent reduction relative to the 5-year average use would be significantly adverse to livestock operations. The long-term reduction of 31 percent would also be significantly adverse.

Impacts to Range Vegetation

There would be approximately 7,490 acres of brush control, 5,400 acres of seedings, 42 water developments, and 42 miles of fence. Brush control would change 5,400 acres of marginally good and fair ecological range condition to good. The seeding would change 5,400 acres of fair and poor ecological condition range to disturbed condition.

The long-term ecological condition is expected to be 1 percent excellent, 72 percent good, 16 percent fair, 10 percent unmapped, and 1 percent disturbed. A total of 5,100 acres of riparian habitat and streambank would be improved by eliminating livestock use.

The long-term trend is expected to be 92 percent static and 8 percent downward. Brush control and seeded areas would be expected to stabilize and remain static in trend. The downward trend areas would continue to decline as undesirable plant species density continued to increase. However, range improvements and intensive management, including appropriate season of use and livestock distribution changes, should allow for the long-term stocking rates under this alternative while maintaining the long-term ecological range condition.

Conclusion: Good ecological condition range would increase from 61 to 72 percent largely because of range improvements and intensive management, including changes in season of use and livestock distribution. This would be a significant beneficial impact.

Impacts to Crucial Wildlife Habitats

Approximately 60 percent of unsatisfactory elk and bighorn range would improve to satisfactory as a result of prescribed burning (48 percent) and improved ecological condition (52 percent). About 44 percent of unsatisfactory deer, antelope, and sage grouse range would improve to satisfactory through interseedings (8 percent) and improved ecological condition (92 percent). About 51 percent of unsatisfactory nongame habitat would improve to satisfactory as a result of interseedings (19 percent) and improved ecological condition (81 percent). Interseedings should produce benefits similar to those associated with improved ecological condition.

The rationale used in assessing the two values of improved ecological condition and prescribed fire based on:

1. Nutritional diversity - Carpenter and Walmo 1981; Dasmann 1971; Nelson and Leege 1982; Yoakum 1980

2. Sage grouse habitat - Autenrieth et al. 1982

3. Nongame habitat - Shelford 1963; Dealey et al. 1981; Hanley and Page 1982

4. Habitat health and stability - Daubenmire 1979; Watt 1972

5. Prescribed fire - Elliot 1978; Kuntz 1982; Wright et al. 1979; Hobbs and Spowart 1984; Peek et al. 1979; Wolfe 1978

Eighty-eight percent of the water-deficient acreage would be improved through installation of eighteen 500-gallon guzzlers. More efficient range use by antelope (Copeland 1980), sage grouse, and nongame species is anticipated.

All fences known or suspected to create a hazard or movement problem for big game would be corrected. Though not quantifiable, fewer deaths, fewer injuries, and more efficient range should result.

Restrictions on domestic livestock (primarily cattle) would allow for 90 to 100 percent of potential elk use to occur on elk winter range (Skovlin et al. 1968; Ralphs 1981). Timber management restrictions would preserve escape and thermal cover qualities of all commercial timber acreage associated with crucial elk winter range (Ralphs 1981).

No-surface-occupancy restrictions would preserve the physical characteristics of 90 percent of the multiple species crucial areas. These restrictions would also help protect 53 percent of known raptor nest sites, 90 percent of known sage grouse strutting grounds, 91 percent of crucial elk winter range, and 100 percent of known burrowing owl habitat.

Mineral activity seasonal use restrictions on all other important seasonal ranges would allow optimal habitat utilization by various species, preserve traditional dispersion patterns, and minimize potentially damaging effects of human induced stress (Selye 1950; Wynne-Edwards 1972).

The following percentages of combined state/private land needed to preserve crucial habitats would come into federal ownership: antelope migration corridor, 100 percent; antelope/deer crucial winter range, 100 percent; and elk breeding area, 100 percent. Land transfers under this alternative would be either insignificant for or beneficial to wildlife.

An additional 42 miles of new fence construction would raise fence density to .55 mile per square mile. This would result in a 12 percent increase in potential hazard levels (Oakley 1973; Papez 1976) and movement problems (Urness 1976; Adams 1982) for big game animals. The ultimate effect on health or population levels of various species would certainly be adverse but cannot be quantified.

Brush control proposed for livestock management would effectively eliminate only 3 percent of sage grouse winter/nesting habitat. The impact on deer and antelope range would not be significant. Five percent of elk winter/spring range would benefit.

The effects of proposed water developments cannot be predicted at this time. These developments would be evaluated through the environmental assessment process at the project level.

Forage reservations for big game under this alternative would allow for the following increases: deer, 40 percent; elk, 44 percent; antelope, 5 percent; and bighorn sheep, 1,800 percent.

Assuming the above improvements and restrictions occur, big game AUM (cattle equivalent) demand could potentially exceed Idaho Department of Fish and Game projections by about 12 percent. Of equal, if not greater, importance would be the level of improvement in unsatisfactory habitat condition and guaranteed long-term habitat integrity. Game and nongame species would benefit more from this alternative than any other.

Conclusion: Overall quality of deer fall/winter/spring range could improve by about 40 to 50 percent, elk and bighorn sheep winter/spring range by 60 to 70 percent, and sage grouse and antelope seasonal ranges by about 10 to 20 percent.

This level of improvement could result in significant population increases of about 3,000 deer (+40%), 873 elk (+44%), 700 sage grouse (+20%), and 380 bighorn sheep (+1,739%). No significant change in the antelope population would be expected.

Forested and nonforested nongame habitat quality could improve by about 20 percent and 50 percent, respectively; this would be significant.

Impacts to Fisheries Habitat

This alternative would improve 3.0 miles of McDevitt Creek and 2.0 miles of Haynes Creek by reducing forage utilization in the riparian area to a maximum level of 50 percent. All livestock grazing would be eliminated on 2.75 miles of Sevenmile Creek and 1.75 miles of Hot Springs Creek.

McDevitt and Haynes Creek are both unclassified streams heavily impacted by livestock. Reduction of grazing to 50 percent utilization would allow improvement of many of the important physical stream characteristics, ultimately improving the riparian aquatic habitat. Annual and woody riparian vegetation, streambank stability, and cover would be expected to improve.

Sevenmile Creek is a high gradient stream with a watershed and stream channel in very poor condition. Total livestock elimination from the drainage would allow an increase of soil-holding vegetation and eliminate mechanical damage to the stream channel by livestock trampling. Elimination of grazing would enhance riparian plant species abundance and diversity, increase watershed stability, reduce erosion, and improve streambank stability. The net result would be a more stable watershed, with less erosion and subsequent siltation into the Salmon River.

Because of the high clay content of soils in Hot Springs Creek and subsequent vertical bank slumping, total elimination of livestock grazing would not stabilize banks in the short term. Overall though, ground cover should increase in the watershed, which would slow the runoff and peak flows that are responsible for the cutting problems.

Conclusion: Fisheries habitat would be significantly improved under this alternative. Restrictive livestock management practices would accomplish the fisheries objectives under this alternative.

Impacts to Water Quality, Watershed, and Soils

Under this alternative, major improvements in watershed condition can be expected. Delaying spring turnout until June 1 would help improve 10,430 acres of watershed presently in unsatisfactory condition. These areas are typically low elevation, low precipitation foothill areas dominated by bentonitic soils. Both the soil and native vegetation are most susceptible to damage from the last part of April through May. Although damage to soil can still occur in June, the majority of the native vegetation has set seed and is not severely impacted.

Soils would improve, given the limited grazing and the resulting increase in forage production under this alternative. The 59,399 acres of highly erosive soils would regain substantial vegetation cover. Most of the 5,028 acres of bentonite would maintain low vegetation cover protection; however, some of this acreage would regain cover and be better protected.

The 13,040 acres of rangeland improvements and 7,546 acres of wildlife improvements would result in increased soil disturbance and potential gullying around watering devices and along pasture fences in the short term. Over the long term, rangeland improvements (50 acres) and wildlife improvements (22 acres) would cause increased soil compaction, reduced tilth and porosity, and increased bulk density. See Table 4-2 for an acreage breakdown by improvement.

Land transfers through the Desert Land Act would involve a maximum of 1,190 acres of Class III or better soils. Adverse impacts associated with the transfer of public land under the Desert Land Act may include the potential for accelerating soil erosion and stream sedimentation and loss of public resource values, primarily riparian areas.

Timber sale activity would increase sedimentation and decrease water quality in those watersheds where timber harvest activities occurred. Most sediment would result from building roads. Basic erosion rates for standard practices in tons per square mile per year are shown in Table 4-1 under Alternative A. A discussion of impacts resulting from logging and road construction is presented under Alternative A.

Conclusion: A slight improvement in overall soil and water quality and watershed condition would occur under this alternative. Benefits of restrictive livestock grazing practices would slightly outweigh negative impacts associated with timber harvest activities.

Impacts to Riparian Habitat

Fencing 21 miles of perennial stream riparian areas would improve 305 acres from the present unsatisfactory condition to excellent condition. Restricting livestock utilization to 50 percent in riparian areas would improve another 5,100 acres of riparian area to good condition. Stream recovery from changes in overgrazing often involves a slow rebuilding process. Expected responses include:

1. Increases in species diversity and biomass

2. Increase in riparian shrub regeneration

3. Improved bank stability and decreased sedimentation resulting from a decrease in bank cutting and the mechanical action of hoof treading

4. Rising of the water table

5. Lower coliform bacteria counts
6. Lower stream temperatures as a result of an increase in woody streamside cover

Conclusion: Substantial riparian improvement would occur as a result of restrictive livestock grazing management.

Impacts to Recreation Uses and Visual Quality

The quantity of recreational opportunities available on 22,685 acres in the three special recreation management areas (SRMAs) would be increased 225 percent. Upgrading the Salmon River SRMA to a permanent Class I VRM area (from an interim Class I) would virtually eliminate all surface disturbing activities except those absolutely required for recreation management or public safety. The level of change to the existing landscape should remain very low (see Appendix F). Withdrawing the SRMA from mineral entry would reduce the amount of land available for mineral development by 4,250 acres, or 1 percent of the planning area.

The visual quality of approximately 15 miles of the Continental Divide National Scenic Trail (CDNST) located in timbered areas would remain the same. Environmental consequences associated with timber harvesting (road construction, vegetative manipulation, and slash disposal) would not occur within one-quarter mile of the trail. Within the next quarter mile (lineally along the trail route) timber harvest would be allowed along with design considerations to reduce visual impacts. These considerations could limit the size of cutting units, location of roads, techniques of slash disposal, and other variables.

Managing the Lewis and Clark National Historic Trail SRMA as a Class I visual resource management (VRM) area would virtually eliminate all surface disturbing activities except those absolutely required for recreation management or public safety. Mineral entry withdrawal would eliminate future mining activities in a narrow strip through the center of the SRMA. Withdrawal of a portion of the SRMA is necessary because the Class I VRM designation could not legally eliminate disturbances resulting from work on valid located mining claims.

The number of developed recreation sites would increase 28.6 percent with the construction of two new sites. These developments, plus improvements to existing sites, would help meet approximately 10 percent of the projected camping and picnicking facility needs for Lemhi County (1983 Statewide Comprehensive Outdoor Recreation Plan). All of BLM's developed facilities would be protected by mineral entry withdrawals.

The cumulative effect of the recreation-oriented mineral entry withdrawals (new and existing) in this alternative would be the withdrawal of 1.6 percent (7,295 acres) of the planning area.

Dispersed recreational opportunities and off-road vehicle (ORV) use would continue as in Alternative A. An ORV closure of the wilderness area following designation would have no impact on ORV recreation since the area is now considered a roadless area with no ORV opportunities or existing use.

Motorized use would continue to occur randomly throughout the resource area and remain at nearly the current level. Use would be relatively light in most areas, with heavier activity occurring along the Salmon River corridor.

Recreation opportunities would remain secure on lands retained in federal ownership. Public recreation uses would be eliminated on lands that were disposed of, unless they were transferred to another public agency. The proposed disposals would have a low impact on recreation use because most of the land parcels are small and inaccessible to public use. The one exception to this is the 720-acre antelope hunting area near the junction of State Highway 28 and Texas Creek.

Mining and mineral leasing activities could impact dispersed recreation by disrupting the natural appearance of the landscape and shifting the recreation opportunity setting from the more natural appearing to the rural type. However, since the extent, location, and nature of future operations is not known, the actual impacts cannot be predicted.

The removal of timber and associated activities such as road building would have a tendency to shift recreation opportunities to less primitive forms. Hunting would increase with better vehicle access, as would motorized recreation and wood gathering.

Conclusion: Existing use opportunities, particularly on the three SMRAs, would be enhanced. An increase of 28.6 percent in developed recreation sites would meet 10 percent of Lemhi County's camping and picnicking needs. The new sites along the Salmon River would be especially beneficial in meeting recreation needs. Wilderness designation's impact on ORV use would be insignificant.

Impacts to Wilderness Values

Wilderness characteristics would be retained on all 24,922 acres of the Eighteenmile Wilderness Study Area. The area would be withdrawn from mineral entry or leasing (subject to valid existing rights), closing 5.4 percent of the planning area to mineral exploration or development. The setting aside of 2,283 acres of commercial timber land would represent 7.5 percent of the commercial timber base in the planning area. This would not affect the present sustained yield allowable cut (see Forestry).

Within the designated wilderness, the natural appearance and wilderness character would remain unchanged. Opportunities for people seeking solitude or primitive recreation activities would be maintained and enhanced.

Alternative C

Long-term benefits to the area's wilderness values would result through designation. Wilderness management would permit the natural ecological processes to continue and prevent degradation of scenic and wildlife values.

Conclusion: Wilderness values would be maintained on all 24,922 acres of the WSA. Impacts to solitude and naturalness would not occur on 2,470 acres otherwise subject to mining activities or on 12,283 acres otherwise subject to forest management.

Impacts to Cultural Resources

This is the most desirable alternative for cultural resource management. Impacts to cultural resource sites from dispersed activities should significantly decrease. Since livestock stocking rates would be cut about 31 percent, vegetation cover could improve in many areas, causing a reduction in surface erosion. Range projects are proposed on 13,040 acres and wildlife projects are proposed on 7,546 acres, as outlined in the general impact section in Alternative A.

Land transfer acreage would be slightly reduced to 4,077 acres from the present 4,818 acres, and lands open for agricultural entry would be decreased to 1,190 acres. Some harmful effects could still occur to cultural resources from land transfer out of federal ownership, as explained in the general section.

Seven areas or complexes would be protected and actively managed through cultural resource management plans. A total of 8,975 acres are proposed for withdrawal from other uses to protect cultural resources.

Conclusion: This would be the most desirable alternative for cultural resource management. Impacts to cultural resource sites from dispersed activities should significantly decrease. Seven important cultural site areas would be protected.

Impacts to Economic Factors

Crop Agriculture

With this alternative there would be 1,190 acres of agricultural development. The total sales would be $241,939, which would translate into direct income of $11,323. This would be 3 percent of current crop agriculture personal income. Total income resulting from this level of development would be $23,623. This is less than 0.1 percent of 1982 Lemhi County personal income.

The estimated gain in direct employment is 2.6 jobs, or 6 percent of current crop agriculture employment. Total employment gain would be 4.4 jobs, which is 0.1 percent of the 1982 Lemhi County total employment. An example of the calculations made in this section can be found in Appendix H.

Livestock (Meat Animals)

The initial stocking level with this alternative would be 22,620 AUMs less than the existing situation. Total sales would decrease by $490,854, resulting in an decrease in direct income of $13,695. This would be 0.7 percent of current permittees' personal income. Total income decrease would be $49,857, which is less than 0.1 percent of 1982 Lemhi County personal income. Over time, AUMs would be gained, so that by the end of 20 years there would be 15,477 fewer AUMs than are currently being used. Total sales by the end of 20 years would decrease by $335,851, which would convert to direct income loss of $9,370. This would represent 0.5 percent of current permittees personal income. Total income decrease would be $34,112, which is less than 0.1 percent of total 1982 Lemhi County income.

The initial stocking level would result in 3.2 jobs being lost in the meat animal sector of the economy. This would be 1.3 percent of current permittees' employment. The total employment decrease would be 9.0 jobs, which is 0.3 percent of the 1982 Lemhi County total employment. In the long term direct employment losses would be 2.2 jobs (0.9 percent of current permittee employment), while total employment losses would be 6.2 jobs (0.2 percent of 1982 Lemhi County total employment).

Active preference would decrease by 26,834 AUMs (if active preference is adjusted to match up with actual use). This would translate into a loss of capital value of between $1,513,885 and $6,708,500. See Appendix H for an example of the calculations made in this section.

Recreation

Although recreation is a fairly significant segment of the Lemhi County economy (see Chapter 3, Economic Conditions), the various alternatives proposed in this RMP are not expected to impact visitor use in any measurable way. Thus, no changes from the existing situation are predicted.

Lumber and Wood Products

The present allowable cut (1.07 million board feet per year) is expected to remain constant through all alternatives in this RMP. Thus, no changes from the existing situation are predicted.

Alternative C

Management Costs

Management costs would increase significantly with this alternative. Activity planning costs of $591,700 and project development costs of $1,035,000 would be incurred with this alternative. Table 4-12 shows these costs by type. These are total costs and would be spread over the 20-year life of the RMP.

TABLE 4-12
MANAGEMENT COSTS
Alternative C

Resource	Activity Plans	Project Dev.	Total
Range	$416,340	$ 617,826	$1,034,166
Wildlife	50,000	161,800	211,800
Recreation	25,000	20,000	45,000
Watershed	10,400	218,400	228,800
Cultural	90,000	17,000	107,000
TOTALS	$591,740	$1,035,026	$1,626,766

Revenue Generation

Over the 20-year life of this RMP, there would be approximately $521,500 in revenues generated on an annual basis. This is roughly 19 percent lower than the revenues generated in fiscal year 1984. This is primarily due to the fact that 2.7 million board feet of timber was sold that year versus the 1.07 million board feet projected on an annual basis over time. Also, grazing fee collections are only 58 percent (on the average) of those collected in fiscal year 1984. Table 4-13 shows the source of the revenues generated under this alternative.

TABLE 4-13
REVENUES GENERATED
Alternative C

Category	Amount
Grazing Fees	$ 45,200
Mineral Leasing	410,000
Land Sales	30,600
Timber Sales	35,200
Recreation Fees	500
TOTAL	$521,500

Receipts to State and Local Governments

The average annual receipts to state and local governments would be $479,200, which is 1 percent greater than was received in fiscal year 1984. This is due largely to the fact that there was a 5 percent reduction in payments in-lieu-of-taxes in fiscal year 1984 while the values estimated here are the total estimated payment (with no reductions). Table 4-14 shows the estimated receipts under this alternative.

TABLE 4-14
RECEIPTS RECEIVED
Alternative C

Type of Receipt	State of Idaho	Lemhi County	Total
In-Lieu-of-Taxes	$ 0	$265,200	$265,200
Grazing Fees	0	5,700	5,700
Mineral Royalties	184,500	20,500	205,000
Land Sales	1,500	0	1,500
Timber Sales	1,800	0	1,800
TOTAL	$ 187,800	$291,400	$479,200

This level of revenues for Lemhi County would represent 18 percent of the county's fiscal year 1984 total revenues.

Conclusion: This alternative would have little economic impact on Lemhi County. The total decreases in income and employment by the end of 20 years would be $10,500 and 1.8 jobs. This would represent less than 0.1 percent of the 1982 Lemhi County total personal income and employment. The greatest impact would be on capital value, which would be decreased by as much as $6.7 million. Management costs would increase dramatically, with a total of $1.6 million being spent on activity planning and project development over the 20-year life of the RMP. Total revenues generated would decline slightly to $521,500, while receipts received by state and local governments would increase slightly to $479,200.

ALTERNATIVE D

Impacts from Lands Actions

The classification for retention under the Classification and Multiple Use Act would be canceled throughout the planning area. Under this alternative, 6,179 acres would be identified for potential transfer from federal ownership. The remainder of the public land in the planning area would be retained. The lands identified for potential disposal have met screening criteria (see pages 39-41 of the Draft Resource Management Plan) that nearly eliminate the likelihood of significant adverse environmental impacts. Therefore, no significant impact is expected from cancellation of the retention classification.

Impacts to Energy and Mineral Availability

Compared to Alternative A, this alternative would result in a 130 percent increase in lands available for solid and fluid mineral leasing with standard stipulations. Seasonal occupancy restrictions would be eliminated and lands covered with the no surface occupancy restrictions would be reduced by 80 percent. No lands would be closed to fluid mineral leasing and all of the lands with the no surface occupancy restriction would be accessible by directional drilling using current technology. There would be an 80 percent decrease in lands closed to solid mineral leasing.

There would be a 33 percent reduction in lands withdrawn from mineral location, increasing by approximately 0.2 percent the resource area lands available. Over 99.6 percent of the lands within the planning area would be open for mineral location and development. There would be an increase of 5.5 percent in lands available for mineral material disposals and a decrease of 93 percent in lands closed to mineral material disposals.

The potential for development on 31 percent of the lands closed to mineral entry is moderate. The remaining 69% of the withdrawn lands have low potential. This represents less than .2 percent of the lands within the planning area. There does not appear to have been any significant exploration work on any of the lands that would be withdrawn.

Mineral material occurrences are widespread throughout the RMP area, and the closure of 1,975 acres involves less than 0.5 percent of the lands within the RMP area. Any impacts would be insignificant.

Conclusion: This alternative would have a slight positive impact on the availability of lands for all forms of mineral exploration and develop-ment.

Impacts to Timber Yield and Availability

The present sustained yield allowable cut for the planning area is 10.71 million board feet per decade. This harvest level must be maintained through Fiscal Year 1988, when a new 10-year allowable cut will be compu- ted. The set-asides in this alternative would reduce the available com- mercial forest and base. Multiple-use restrictions would further reduce potential timber production and yield. These set-asides and restrictions would enter into the new allowable cut computation in 1988 and would decrease the harvest level accordingly.

Harvest practices such as clearcut, shelterwood, and selective cut would influence vegetation cover on approximately 300 acres each year. These harvest activities would benefit forest resources by regenerating the stand, reducing insects and disease through removal of infected trees, and improving growth and production of residual trees.

Forest development practices such as thinning, planting, and use of herbicides would be used on available commercial forest lands. These techniques would improve stocking levels and growth rates and decrease insect and disease problems.

Alternative D

Under this alternative, 15 acres of suitable commercial forest land would be set aside from the timber production base to ensure protection of the Williams Lake Recreation Site. The resulting loss in harvestable timber yield from this set-aside would be approximately 1,000 board feet/year.

Of the 30,294 acres of available commercial forest land, 1,646 acres would receive restricted management to reduce the impacts to crucial elk winter range. A 20 percent reduction in harvestable timber yield would be expected as a result of these restrictive measures.

An additional 656 acres of available commercial forest land would also be restricted to maintain the visual qualities of the existing landscape within the 1/4-mile-wide Continental Divide Trail corridor. Maintaining a Class III VRM classification in this area would result in a 10 percent reduction in harvestable timber yield from the restricted stands.

The impacts of implementing these restrictions are shown in Table 4-15.

TABLE 4-15
SET-ASIDES AND CLOSURES

	Suitable CFL[1] Set-Aside		Loss in Harvestable
Set-Aside	Acres	% of Total Suitable CFL	Timber Yield MBF[2]/Year
Elk Winter Range	1,646	5.4	26 MBF/Year
Continental Divide National Scenic Trail	656	2.2	5 MBF/Year
TOTALS	2,302	7.6	31 MBF/Year

[1] Commercial Forest Land
[2] Thousand Board Feet

Intensive management of the 30,294 acres of available commercial forest land would enable the planning area to support its present sustained yield allowable cut of approximately 10.71 million board feet per decade. Management of the 26,269 acres of available woodland would increase the production of non-sawtimber products such as firewood and Christmas trees.

Conclusion: The adverse impact on timber yield and on the availability of commercial forest lands and woodlands would be insignificant under this alternative. The amount of suitable commercial forest land unavailable for timber harvest would be negligible (0.049 percent). All woodland within the planning area would be open to woodland product sales. Only about 7 percent of the available commercial forest land would be subject to harvesting and management restrictions to protect crucial elk winter range and the Continental Divide National Scenic Trail. Loss in harvestable timber yield as a result of these set-asides and restrictions would total approximately 32,000 board feet per year.

Impacts to Livestock Grazing

Under this alternative the initial stocking level would be 53,803 AUMs. This represents a 2 percent increase above the 5-year average use. The long-term stocking level would be 59,129 AUMs, a 10 percent increase over 5-year average use. Approximately 5,987 acres would be open for possible transfer. This would result in the loss of an additional 885 AUMs. Six allotments would be eliminated and 29 other allotments would be reduced.

Conclusion: Under this alternative, the short-term 2 percent increase relative to the 5-year average use would be insignificant to livestock operations. The long-term 10 percent increase would be significantly beneficial.

Impacts to Range Vegetation

There would be approximately 14,000 acres of brush control, 17,500 acres of seedings, and 37 water developments. Brush control would change 14,000 acres of low good and high fair ecological condition range to good. The seedings would change 17,500 acres of low fair and poor ecological condition range to disturbed condition.

The long-term ecological condition is expected to be 3 percent excellent, 64 percent good, 18 percent fair, 10 percent unmapped, and 4 percent disturbed. A total of 182 acres of riparian habitat and streambank would be improved by eliminating livestock grazing.

The long-term trend is expected to be 12 percent upward, 81 percent static, and 7 percent downward. Brush control and seeded acres would be expected to stabilize and remain static in trend. The downward trend areas would continue to decline as undesirable plant species density continued to increase. However, range improvements and intensive management, including appropriate season of use and livestock distribution changes, should allow for the long-term stocking rates under this alternative while maintaining the long-term ecological range condition.

Conclusion: Good ecological condition would increase from 61 to 64 percent, resulting in a slightly beneficial impact.

Impacts to Crucial Wildlife Habitats

Approximately 12 percent of unsatisfactory elk and bighorn range would improve to satisfactory as a result of improved ecological condition. About 21 percent of unsatisfactory deer, antelope, and sage grouse range would improve to satisfactory. Thirteen percent of this improvement would result from interseedings proposed by range and 87 percent from improved ecological condition. About 31 percent unsatisfactory nongame habitat would improve to satisfactory as a result of interseedings (41 percent) and improved ecological condition (59 percent). It is assumed that interseedings would produce benefits similar to those associated with improved ecological condition.

The rationale used in assessing the two values of improved ecological condition and prescribed fire based on:

1. Nutritional diversity - Carpenter and Walmo 1981; Dasmann 1971; Nelson and Leege 1982; Yoakum 1980
2. Sage grouse habitat - Autenrieth et al. 1982
3. Nongame habitat - Shelford 1963; Dealey et al. 1981; Hanley and Page 1982
4. Habitat health and stability - Daubenmire 1979; Watt 1972
5. Prescribed fire - Elliot 1978; Kuntz 1982; Wright et al. 1979; Hobbs and Spowart 1984; Peek et al. Wolfe 1978

Twenty-four percent of the water-deficient acreage would be improved through installation of five 500-gallon guzzlers. More efficient range use by antelope (Copeland 1980), sage grouse, and nongame species is anticipated.

About 26 percent of fences known or suspected to create a hazard or movement problem for big game would be corrected. Though not quantifiable, fewer deaths, fewer injuries and more efficient range use should result.

Restrictions on domestic livestock (primarily cattle) would allow for 78 percent of potential elk use to occur on elk winter range (Skovlin et al. 1968; Ralphs 1981). Timber management restrictions would guarantee preservation of escape and thermal cover qualities of 32 percent of the commercial timber acreage associated with crucial elk winter range (Ralphs 1981). These stands would still be vulnerable to mineral activity, however.

The following percentages of combined state/private land needed to preserve crucial habitats would come into federal ownership: antelope migration corridor, 54 percent; antelope/deer crucial winter range, 24 percent; and elk breeding area, 0 percent.

A land transfer south of Leadore would effectively seal off a migration corridor for about 200 antelope. This area also contains a sage grouse strutting ground and about 54 percent of the potential nesting habitat associated with that strutting ground. Forty-three percent of deer, 27 percent of antelope, and 25 percent of sage grouse crucial winter range immediately west of Leadore would go into private ownership. Under this alternative, 150 acres of crucial deer winter range in the Mollies Gulch area would be lost (15 percent of discrete wintering area involved), and deer and antelope movements would be hindered by narrowing of a migration corridor.

An additional 56 miles of new fence construction would raise fence density to .56 mile per square mile. This would result in a 14 percent increase in potential hazard levels (Oakley 1973; Papez 1976) and movement problems (Urness 1976; Adams 1982) for big game animals. The ultimate effect on health or population levels of various species would certainly be adverse but cannot be quantified.

Brush control proposed for livestock management would effectively eliminate 6 percent of sage grouse winter/nesting habitat and 7 percent of antelope winter range. The impact on crucial deer winter range would be insignificant (less than 2 percent). Five percent of elk winter/spring range would benefit.

The effects of proposed water developments cannot be predicted at this time. These developments would be evaluated through the environmental assessment process at the project level.

The location and magnitude of future mining and oil and gas activity is unknown. The following potential impacts are necessarily general and reflect assumed or actual impacts of mineral activities in other areas.

The most significant long-term impact would be habitat loss caused by removal of vegetation and topsoil and destruction of cliff nest sites of raptors. Other potential sources of adverse impacts include increased poaching, raptor losses to new power transmission lines, the cutting off of migration routes by fencing or other construction, increased injury or death due to greater vehicle activity, possible poisoning from various toxic wastes, and increased wildlife harassment (Currey 1976; Hinkle et al. 1981; Korfage 1976; USDA 1980).

Under this alternative, harassment (damaging stress) would be a significant adverse impact. The combination of maximum mineral activity and lack of any seasonal use restrictions would be very disruptive, if not lethal, to many species of wildlife (Batcheler 1968; Christian 1963;

Horejsi 1976; Morgantini and Hudson 1979; Parker et al. 1984; Selye 1950; Wynne-Edwards 1972). The ultimate impact of harassment, particularly chronic low grade harassment, is frequently subtle, indirect, and not evident for many years. Impacts are necessarily difficult to quantify.

In spite of the habitat improvement and protection measures proposed under this alternative, substantial population and habitat losses would be expected. These are shown in Table 4-16.

TABLE 4-16
WILDLIFE LOSSES

Species/Habitat	Decrease in Population Numbers or Estimated Habitat Quality (percent)
Deer Population	21
Elk Population	56
Antelope Population	33
Bighorn Sheep Population	100
Sage grouse Habitat	40
Known Raptor Nest Sites	53
Known Burrowing Owl Habitat	100

NOTE: Losses to the above order would occur among many other species as well.

Choosing this alternative would indicate management acceptance of losses of at least this magnitude. However, the probability of mineral and other human activity occurring at a high enough level to cause the losses noted in Table 4-16 does not appear great at this time.

Conclusion: Habitat quality of deer fall/winter/spring range could decline by an estimated 20 to 25 percent, elk and bighorn sheep winter/spring range by 50 to 60 percent, and sage grouse and antelope seasonal ranges by 30 to 40 percent.

Habitat quality decline could be expected to result in substantial reductions--1,600 deer (-21%), 1,114 elk (-56%), 900 antelope (-37%), and 880 sage grouse (-25%). Bighorn sheep could be eliminated; given the low numbers of bighorn, the population could easily be reduced to a nonviable level.

Habitat quality for nongame species could be reduced by about 20 percent.

Impacts to Fisheries Habitat

Fisheries and riparian habitat would remain stable on stream sections presently in good condition, while sections in poorer condition would continue to decline. Sevenmile Creek, a tributary to the Salmon River south of Salmon, would continue to cause a serious impact to the spring steelhead fishery in the Salmon River. Large amounts of silt could enter the Salmon River from Sevenmile Creek, resulting in the total elimination of the spring fishery from Sevenmile Creek downstream. This could have a significant economic impact on the Salmon community when the fishery was lost.

Fisheries habitat in small, unclassified, low gradient streams would continue to decline in condition due to continued livestock grazing at existing levels. Larger streams or small streams with high gradients would remain in their present conditions.

Conclusion: Continued degradation of fisheries habitat would occur under this alternative. Livestock grazing would be primarily responsible.

Impacts to Water Quality, Watershed, and Soils

Areas presently in unsatisfactory watershed condition typically receive little precipitation (7 to 11 inches per year). Low rainfall, in conjunction with soils that are not capable of producing large amounts of forage and have historically been mismanaged, means that these areas would be the last to respond to management, if indeed they did at all. To expect significant improvement in areas in 15 to 20 years with grazing systems and improvements that are the product of 50 to 75 years of mismanagement in low precipitation zones is unrealistic.

Most highly erosive soils in the area are located on low elevation early spring range. These soils are most susceptible to damage during the very times they are used by livestock. There would continue to be 20,100 acres of fair and poor condition range on these soils. The loss of native grasses and forbs and the increase in invader species and annual grasses and forbs would further impact the watershed.

Erosion trends would continue to reflect range condition. The 59,399 acres of highly erosive soils would continue to pose a serious problem needing additional monitoring. The bentonite badlands soils (5,029 acres) would be most susceptible to accelerated erosion and would experience a continued downward trend in some areas of the Hot Springs, South Carmen, and Pratt Creek allotments.

The 31,668 acres of rangeland improvements and 48 acres of wildlife improvements would cause increased soil disturbance and loss of vegetation around watering devices and along fences in the short term. Over the long term, 35 acres of rangeland improvements and 6 acres of wildlife improvements would cause increased soil compaction and bulk density and decreased soil tilth and porosity. See Table 4-2 for a detailed breakdown of acreages.

Alternative D

Land transfers through the Desert Land Act would involve a maximum of 2,550 acres of Class III or better soils. Adverse impacts associated with the transfer of public land under the Desert Land Act could include the potential for accelerating soil erosion and stream sedimentation and the loss of public resource values, primarily riparian areas.

Impacts resulting from timber sales activities, particularly road building, are described under Alternative A and portrayed in Table 4-1.

Conclusion: An overall reduction in soil and water quality and watershed condition would occur under this alternative. Livestock grazing and timber harvest activities would contribute to the overall degradation.

Impacts to Riparian Habitat

Riparian areas make up only a small portion of the total land area. However, they are more productive in terms of both plant and animal species diversity and biomass per unit area than the more arid remainder of the land base.

A total of 196 acres of riparian area would be improved by total exclusion of livestock by fencing. However, a reduction in the quality of riparian zones would occur in the remainder of the area under this alternative. In order to meet livestock grazing management goals on upland sites, riparian zone vegetation would receive between 70 and 90 percent utilization. Although overall range condition would improve under this alternative, riparian areas would become "sacrifice areas" and experience further degradation.

Riparian areas would experience the following adverse impacts:

1. Higher stream temperatures resulting from a lack of sufficient woody streamside cover
2. Excessive silt (sediment) in the channel from bank and upland erosion
3. High coliform bacteria counts from upper watershed sources
4. Channel widening from hoof-caused bank sloughing and later erosion by water
5. Change in structure of the water column and the channel it flows in
6. Change to, reduction in, or elimination of vegetation

7. Total elimination of riparian areas by channel degradation and lowering of the water table

8. Gradual stream channel trenching or braiding, depending on soils and substrate composition, with concurrent replacement of riparian vegetation with more zeric plant species (Skovlin 1981)

Riparian areas adjacent to pasture or allotment boundaries would often be reduced to mineral soil, as would key shading areas. The percent composition of native perennial grasses and forbs would remain low. A reduction in woody vegetation over natural conditions has already taken place in some riparian areas. This effectively reduces the sediment filtering capacities of riparian areas during thunderstorm and snowmelt events and results in lower water quality.

Conclusion: A gradual reduction in riparian area condition would occur as a result of increased livestock use.

Impacts to Recreation Uses and Visual Quality

The quantity of recreational opportunities available on 10,085 acres in the three special recreation management areas (SRMAs) would be increased 55 percent. However, the decrease in the quality of the recreational opportunities could negate the increase in quantity. No areas would be managed for visual resource management Classes I or II. As a result, surface disturbing activities would be allowed in the existing interim Class I (29,327 acres) and Class II (15,720 acres) areas, resulting in a loss of existing visual qualities. The intent of Congress in establishing the Continental Divide National Scenic Trail and the Lewis and Clark National Historic Trail would be reversed if developments within the trail corridors so altered the existing environment that the feeling of walking a historic route or experiencing the scenery along the nation's crest was lost.

Developed site recreation opportunities would not increase and no attempt would be made to meet the recreation facility needs for Lemhi County identified in the 1983 Idaho Statewide Comprehensive Outdoor Recreation Plan. Developed site recreation opportunities could actually decrease by 43 percent if mineral entry occurred on the three developed sites not now protected by a mineral entry withdrawal.

The cumulative effect of the mineral entry withdrawals would be an increase in the amount of land open for mineral exploration and development of 0.14 percent (640.14 acres) due to the revocation of existing recreation site withdrawals which are no longer required for recreation management.

The variety of dispersed recreation opportunities as represented by the recreation opportunity spectrum (ROS) classes would be reduced by 60 percent. Three ROS classes would be completely eliminated because of eventual road building and other developments associated with timber harvest and mining. The three eliminated opportunity classes would be primitive, semi-primitive nonmotorized, and semi-primitive motorized.

Designating the entire planning area as open to off-road vehicle (ORV) use would remove all of the existing limited area designations. The elk wintering area near Agency and Warmsprings creeks would be subject to unrestricted snowmobile use. The Eighteenmile Wilderness Study Area (WSA) would also be open to unrestricted ORV use if Congress did not designate it as wilderness. This alternative would increase the total acreage available for unrestricted ORV use by 10 percent (41,152 acres).

Recreation opportunities would remain secure on lands retained in federal ownership. Public recreation uses would be eliminated on lands that were disposed of, unless they were transferred to another public agency. The proposed disposals would have a low impact on recreation use because most of the land parcels are small and inaccessible to public use. The one exception to this is an 1,080-acre antelope hunting area near the junction of the Eighteenmile and Hawley Creek roads.

Mining and mineral leasing activities could impact dispersed recreation by disrupting the natural appearance of the landscape and shifting the recreation opportunity setting from the more natural appearing to the rural type. However, since the extent, location, and nature of future operations is not known, the actual impacts cannot be predicted. In general, impacts would be lessened because of restrictions and stipulations on leasing activities.

The removal of timber and associated activities such as road building would have a tendency to shift recreation opportunities to less primitive forms. Hunting would increase with better vehicle access, as would motorized recreation and wood gathering.

Conclusion: The complete elimination of primitive, semi-primitive nonmotorized, and semi-primitive motorized recreation opportunities would result in a significant adverse impact. There would be no increase in developed sites, so user needs would not be met. Surface disturbing activities would adversely impact the three SRMAs.

Wilderness

None of the wilderness values on 24,922 acres would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated for the next five years.

In the long-term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. Prospecting for phosphate is expected to occur on 1,920 acres, with development of a mine anticipated if an economically feasible discovery is made. Known deposits occur just north of the WSA. Two miles of road construction would probably be associated with the phosphate area. The wilderness value of naturalness would be lost on the 1,920 acres. The perception of naturalness would be essentially lost over an additional 200-acre area because the area of phosphate prospecting could be seen.

Renewed mining of gypsum in Clear Creek would impact the perception of naturalness on 300 acres adjacent to the mine. One mile of road construction is anticipated.

For the purpose of this analysis, it is assumed that two discoveries and lode claims would be made between Dry Canyon and Horse Thief Creek. Based on similar developments in the area, construction of one mile of road and 50 acres of surface disturbance is expected.

The wilderness value of naturalness would be adversely impacted on a total of 2,470 acres between Dry Canyon and Horse Thief Creek.

In addition to naturalness, activities associated with mineral development would adversely impact the wilderness value of solitude. Sights and sounds from traffic and construction related to the above development would lower the quality of solitude on 2,470 acres.

Sights and sounds from recreational off-road vehicle (ORV) use would have an adverse impact on solitude. However, this impact is expected to be negligible compared to mining activities since ORV use is estimated to be less than 25 visitor days annually (estimate by BLM personnel), and is expected to remain below 50 visitor days annually for the next 15 to 20 years.

Conclusion: Wilderness values would be adversely affected on 10 percent (2,470 acres) of the WSA. Wilderness values on 90 percent (22,452 acres) would be subject to loss but no adverse activities are anticipated.

Impacts to Cultural Resources

This is the least favorable alternative for cultural resources. Under Alternative D, impacts to cultural resource sites from dispersed activities should increase as noted in the general impact section in Alternative A. Short-term and long-term livestock trampling would increase because of the anticipated 10 percent increase in livestock use.

Impacts from surface erosion are expected to increase, resulting in an increase in surface modification and horizontal displacement of artifacts. The stratigraphic integrity of sites could also be affected.

Alternative D

Range improvements would affect 31,668 acres and wildlife projects are proposed for 48 acres. An unknown number of cultural resource sites would be affected by these projects. Standard operating procedures should mitigate effects on identified sites. However, production pressures and budget restrictions could handicap inventory and mitigation efforts.

More acreage would be open to mining with very few restrictions. This could create some harmful impacts for cultural resources. Total transfer of public lands both through transfer and agricultural entry would be 6,179 acres, nearly the same level as for Alternative C.

Activity plans would be developed to protect three areas. Withdrawals to protect cultural resources would be much less for this alternative.

Conclusion: This is the least favorable alternative for cultural resources. Under Alternative D, impacts to cultural resources should significantly increase, while protective withdrawals would decrease.

Impacts to Economic Factors

Crop Agriculture

With this alternative there would be 2,550 acres of agricultural development. The total sales would be $518,441, which would translate into direct income of $24,263. This would be 7 percent of current crop agriculture personal income. Total income resulting from this level of development would be $50,620. This is less than 0.1 percent of 1982 Lemhi County personal income.

The estimated gain in direct employment is 5.5 jobs, or 13 percent of current crop agriculture employment. Total employment gain would be 9.3 jobs, which is 0.3 percent of the 1982 Lemhi County total employment. An example of the calculations made in this section can be found in Appendix H.

Livestock (Meat Animals)

The initial stocking level with this alternative would be 1,262 AUMs more than the existing situation. Total sales would increase by $27,385, resulting in an increase in direct income of $764. This would be less than 0.1 percent of current permittee personal income. Total income increase would be $2,781, which is less than 0.1 percent of 1982 Lemhi County personal income. Over time, AUMs would be gained, so that by the end of 20 years there would be 6,588 more AUMs than are currently being used. Total sales by the end of 20 years would increase by $142,960, which would convert to direct income gain of $3,989. This would represent 0.2 percent of current permittees' personal income. Total income increase would be $14,520, which is less than 0.1 percent of total 1982 Lemhi County income.

The initial stocking level would result in 0.2 jobs being gained in the meat animal sector of the economy. This would be less than 0.1 percent of current permittee employment. The total employment increase would be 0.6 jobs, which is less than 0.1 percent of 1982 Lemhi County total employment. In the long term, direct employment gains would be 0.9 jobs (0.4 percent of current permittee employment), while total employment losses would be 2.7 jobs (less than 0.1 percent of 1982 Lemhi County total employment).

Active preference would decrease by 4,769 AUMs (if active preference is adjusted to match up with actual use). This would translate into a loss of capital value of between $269,051 and $1,192,250. See the Appendix H for an example of the calculations made in this section.

Recreation

Although recreation is a fairly significant segment of the Lemhi County economy (see Chapter 3, Economic Conditions), the various alternatives proposed in this RMP are not expected to impact visitor use in any measurable way. Thus, no changes from the existing situation are predicted.

Lumber and Wood Products

The present allowable cut (1.07 million board feet per year) is expected to remain constant through all alternatives in this RMP. Thus, no changes from the existing situation are predicted.

Management Costs

Management costs would increase significantly with this alternative. Activity planning costs of $513,700 and project development costs of $868,600 would be incurred with this alternative. Table 4-17 shows these costs by type. These are total costs and would be spread over the 20-year life of the RMP.

Alternative D

TABLE 4-17
MANAGEMENT COSTS
Alternative D

Resource	Activity Plans	Project Dev.	Total
Range	$416,340	$ 683,900	$1,100,240
Wildlife	20,000	13,300	33,300
Recreation	25,000	20,000	45,000
Watershed	10,400	140,400	150,800
Cultural	42,000	11,000	53,000
TOTALS	$513,740	$ 868,600	$1,382,340

Revenue Generation

Over the 20-year life of this RMP there would be approximately $549,100 in revenues generated on an annual basis. This is roughly 14 percent lower than the revenues generated in fiscal year 1984. This is primarily due to the fact that 2.7 million board feet of timber was sold that year versus the 1.07 million board feet projected on an annual basis over time. Table 4-18 shows the source of the revenues generated under this alternative.

TABLE 4-18
REVENUES GENERATED
Alternative D

Category	Amount
Grazing Fees	$ 76,200
Mineral Leasing	410,000
Land Sales	27,200
Timber Sales	35,200
Recreation Fees	500
TOTAL	$549,100

Receipts to State and Local Governments

The average annual receipts to state and local governments would be $482,800, which is 1 percent greater than was received in fiscal year 1984. This is due largely to the fact that there was a 5 percent reduction in payments-in-lieu-of-taxes in fiscal year 1984, while the values estimated here are the total estimated payment (with no reductions). Table 4-19 shows the estimated receipts under this alternative.

TABLE 4-19
RECEIPTS RECEIVED
Alternative D

Type of Receipt	State of Idaho	Lemhi County	Total
In-Lieu-of-Taxes	$ 0	$265,100	$265,100
Grazing Fees	0	9,500	9,500
Mineral Royalties	184,500	20,500	205,000
Land Sales	1,400	0	1,400
Timber Sales	1,800	0	1,800
TOTAL	$ 187,700	$295,100	$482,800

This level of revenues for Lemhi County would represent 19 percent of the county's fiscal year 1984 total revenues.

Conclusion: This alternative would have little economic impact on Lemhi County. The total increases in income and employment by the end of 20 years would be $65,100 and 12.0 jobs. This would represent 0.1 percent of the 1982 Lemhi County total personal income and 0.4 percent of employment. Capital value would be increased by as much as $1.2 million. Management costs would increase dramatically, with a total of $1.4 million being spent on activity planning and project development over the 20-year life of the RMP. Total revenues generated would decline slightly to $549,100, while receipts received by state and local governments would increase slightly to $482,800.

ALTERNATIVE E

Impacts from Lands Actions

The classification for retention under the Classification and Multiple Use Act would be canceled throughout the planning area. Under this alternative, 10,397 acres would be identified for potential transfer from Federal ownership. The remainder of the public land in the planning area would be retained. The lands identified for potential disposal have met screening criteria (see pages 39-41 of the Draft Resource Management Plan) that nearly eliminate the likelihood of significant adverse environmental impacts. Therefore, no significant impact is expected from cancellation of the retention classification.

Impacts to Energy and Mineral Availability

Compared to Alternative A, this alternative would result in a 14 percent decrease in lands available for oil and gas leasing with standard stipulations, a 10 percent increase in lands that would be leased with seasonal occupancy restrictions, and 15 percent increase in lands which would be leased with the no surface occupancy stipulation. No lands would be closed to oil and gas leasing.

There would be a 15 percent decrease in lands available for geothermal leasing with the standard stipulations, a 10 percent increase in lands that could be leased for geothermal resources with seasonal restrictions, and a 15 percent increase in lands that would be leased only with the no surface occupancy stipulation. A total of 800 acres would be closed to geothermal leasing for recreational development.

There would be a 14 percent decrease in lands available for solid mineral leasing with the standard stipulations. Lands having seasonal occupancy restrictions would increase by 10 percent and lands closed to solid mineral leasing by 15 percent.

There would be a 0.5 percent decrease in lands open for the location of mining claims, and a 113 percent increase in lands withdrawn from mineral entry. A 1.9 percent decrease would occur in lands available for mineral material disposals. This would represent an increase of approximately 31 percent in lands closed to mineral material disposal. However, approximately 92 percent of the RMP area would remain open for mineral material disposals.

The seasonal occupancy restrictions on leasing would not significantly limit mineral exploration and development opportunities. However, under the no surface occupancy restriction, up to 7,949 acres would be beyond the practical reach of directional drilling using present technology. This represents approximately 1.7 percent of the lands available for oil and gas leasing.

In addition, 800 acres reported to be prospectively valuable for geothermal leasing would be closed. Coupled with the 1,260 acres of prospectively valuable geothermal lands that would be beyond the reach of directional drilling, this alternative would remove 2,064 acres, or 5 percent, of the prospectively valuable geothermal lands from exploration and development. Both the no surface occupancy and the no leasing restrictions would significantly limit the availability of these lands for exploration and development of fluid mineral resources.

Approximately 7.7 percent of the planning area would be closed to solid mineral leasing. Included would be approximately 33 percent (1,690 acres) of the lands reported to have potential for phosphate development.

The potential for discovery of locatable minerals is moderate on 77 percent of the lands that would be withdrawn from mineral entry. The potential is low on the remaining 23 percent of the withdrawn lands. The 5,002 acres withdrawn under this alternative represent slightly over 1 percent of the lands within the planning area. There does not appear to have been any significant exploration for locatable minerals on most of the lands that would be withdrawn.

Mineral material disposals would still be allowed from 92.5 percent of the lands in the planning area. Mineral materials are widespread throughout the RMP area and ample reserves would still be available for use. Most closures would be small and material could be obtained from adjacent lands. This could require some longer haul distances, which could increase the final cost of the delivered product.

The only large blocks of land that would not be available for mineral material disposal would be portions of the Eighteenmile WSA. There has been historic use of mineral materials from this area in the past. Because of the area's remoteness, demand for material would be unlikely in the foreseeable future.

Conclusion: This alternative would have a slightly adverse impact on the availability of lands for exploration and development of all mineral resources except for lands thought to have value for phosphate, where the impacts would be moderate, and for mineral materials within the Salmon River corridor, where the impact would also be moderate.

Impacts to Timber Yield and Availability

The present sustained yield allowable cut for the planning area is approximately 10.71 million board feet per decade. This harvest level must be maintained through Fiscal Year 1988, when a new 10-year allowable cut will be computed.

Harvest practices such as clearcut, shelterwood, and selective cut would influence vegetation cover on approximately 300 acres each year. These harvest activities would benefit forest resources by regenerating the stand, reducing insects and disease through removal of infected trees, and improving growth and production of residual trees.

Forest development practices such as thinning, planting, and use of herbicides would be implemented on available commercial forest lands. The beneficial impact of these silvicultural techniques would be improved stocking levels and growth rates and a decrease in insect and disease problems in these stands.

In this alternative, all 30,309 acres of suitable commercial forest land would be available for intensive forest management. No set-asides or restrictions would be imposed.

Other forest lands available for management would include all 26,269 acres of woodland. Management of this woodland would increase the production of non-sawtimber products such as firewood and Christmas trees.

Conclusion: There would be no adverse impact on timber yield and on the availability of commercial forest lands and woodlands under this alternative. All suitable commercial forest land would be available for timber harvest and all woodland would be open to woodland product sales.

Impacts to Livestock Grazing

Under this alternative the initial stocking level would be 49,589 AUMs. This represents a 22 percent reduction from active preference and 7 percent reduction from the 5-year average use. The long-term stocking level would be 55,465 AUMs. This would be 13 percent below active preference and 4 percent below the 5-year average use. There are 9,983 acres that would be transferred. This would result in the loss of 1,393 AUMs. Seven allotments would be eliminated and 36 allotments could be reduced.

Conclusion: Under this alternative, the short-term seven percent reduction relative to the 5-year average use would be significantly adverse to livestock operations. The long-term four percent increase would be significantly beneficial.

Impacts to Range Vegetation

There would be approximately 22,700 acres of brush control, 4,400 acres of seeding, 36 water developments, and 63 miles of fence. Brush control would change 22,700 acres of low good and high fair range condition to good. The seedings would change 4,400 acres of low fair and poor condition range to disturbed condition.

The long-term ecological condition is expected to be 3 percent excellent, 65 percent good, 21 percent fair, 10 percent unmapped, and 1 percent disturbed.

The long-term trend is expected to be 16 percent upward, 77 percent static, and 7 percent downward. Brush control and seeded areas would be expected to stabilize and remain static in trend. The downward trend areas would continue to decline as undesirable plant species density continued to increase. However, range improvements and intensive management with appropriate season of use and livestock distribution changes should allow for the long-term stocking rates under this alternative while maintaining the long-term ecological range condition.

Conclusion: Good ecological condition would increase from 61 to 65 percent, resulting in a moderately beneficial impact.

Impacts to Crucial Wildlife Habitats

Approximately 26 percent of unsatisfactory elk and bighorn range would improve to satisfactory. Fifty-five percent of the improvement would result from prescribed burning and 45 percent from improved ecological condition. About 11 percent of unsatisfactory deer, antelope, and sage grouse range and 16 percent of unsatisfactory nongame habitat would improve to satisfactory. Twenty-one percent of the improved deer, antelope, and sage grouse range and 21 percent of improved nongame habitat would result from interseedings planned by range. The remaining improvement would be from improved ecological condition. The interseedings would produce benefits similar to those associated with improved ecological condition.

The rationale used in assessing the value of improved ecological condition and prescribed fire based on:

1. Nutritional diversity - Carpenter and Walmo 1981; Dasmann 1971; Nelson and Leege 1982; Yoakum 1980
2. Sage grouse habitat - Autenrieth et al. 1982
3. Nongame habitat - Shelford 1963; Dealey et al. 1981; Hanley and Page 1982
4. Habitat health and stability - Daubenmire 1979; Watt 1972
5. Prescribed fire - Elliot 1978; Kuntz 1982; Wright et al. 1979; Hobbs and Spowart 1984; Peek et al. 1979; Wolfe 1978

Forty-four percent of the water-deficient acreage would be improved through installation of nine 500-gallon guzzlers. More efficient range use by antelope (Copeland 1980), sage grouse, and nongame species would be expected.

About 66 percent of fences known or suspected to create a hazard or movement problem for big game would be corrected. Though not quantifiable, fewer deaths, fewer injuries, and more efficient range use would be expected.

Restrictions on domestic livestock would allow for 73 percent of potential elk use to occur on elk winter range (Skovlin et al. 1968; Ralphs 1981).

No surface occupancy restrictions would preserve the physical characteristics of about 26 percent of the multiple species crucial areas. These restrictions would also help protect 32 percent of known raptor nest sites, 24 percent of known sage grouse strutting grounds, and 55 percent of crucial elk winter range.

Mineral activity seasonal use restrictions on all other important seasonal ranges would help allow optimal habitat utilization by various species, preserve traditional dispersion patterns and minimize potentially damaging effects of human induced stress (Selye 1950; Wynne-Edwards 1972). Human induced stress is discussed more fully under Alternative D.

An additional 63 miles of new fence construction would raise fence density to .58 mile per square mile. This would result in an 18 percent increase in potential hazard levels (Oakley 1973; Papez 1976) and movement problems (Urness 1976; Adams 1982) for big game animals. The ultimate effect on health or population levels of various species would certainly be adverse but cannot be quantified.

Brush control proposed for livestock management would effectively eliminate 2 percent of sage grouse winter/nesting habitat, 3 percent of crucial deer winter range, and 5 percent of antelope winter range. Five percent of elk winter/spring range would benefit.

The effects of proposed water developments cannot be predicted at this time. These developments would be evaluated through the environmental assessment process at the project level.

The following percentages of combined state/private land needed to preserve crucial habitats would come into federal ownership: antelope migration corridor, 34 percent; antelope/deer crucial winter range, 0 percent; and elk breeding area, 100 percent.

Forage reservations for big game under this alternative would allow for the following percent increases or decreases: deer, plus 13 percent; elk, minus 40 percent; antelope, minus 7 percent; and bighorn sheep, plus 590 percent.

Land transfers would effectively seal off a migration corridor for about 200 antelope. This area southeast of Leadore also contains a sage grouse strutting ground and about 54 percent of the potential nesting habitat tied to the strutting ground. Forty-three percent of deer, 27 percent of antelope and 25 percent of sage grouse crucial range immediately west of Leadore would go into private ownership. Under this alternative, 160 acres of crucial deer winter range near Mollies Gulch would be lost (15 percent of discrete range involved) and deer and antelope movement through the area hindered by narrowing of the migration corridor. 2,080 acres of antelope winter range would go to private. 920 acres of the 2,080 acres is 30 percent of one discrete winter area.

Maximum forest development and management solely for wood products production would be extremely damaging to many species of wildlife. From a holistic standpoint, the entire commercial forest ecosystem would become less diverse. A preoccupation with obtaining wood products efficiently would put all other plant and animal species at risk. The ecosystem would be inherently less healthy and less stable. Vulnerability would increase and recovery capabilities would be lessened (Daubenmire 1970; Watt 1972).

More specifically, bird diversity could decline up to 70 percent to 80 percent and bird densities 80 to 90 percent (McClelland 1979). Impacts on elk would be immediately obvious and probably long-term. Loss of security cover and thermal cover, along with increased roading and disturbance and prohibitive slash depths, could result in at least a 40 to 50 percent reduction in elk use (Lyon and Ward 1982; Montana Department of FW&P 1985; Ralphs 1981; Thomas 1979; and others).

Except for Alternative A, this alternative provides the least improvement of unsatisfactory condition habitat. This is primarily a result of reduced ecological condition improvement derived from range.

An important migration corridor for about 200 antelope would be sealed off through land transfer (D.L.E.).

Elk and forest nongame species (particularly birds) could be severely impacted. Actual impacts would likely be something less than implied due to expected accommodations or concessions obtained through the environmental assessment process.

Conclusion: Deer fall/winter/spring range quality may improve by 10 to 20 percent, sage grouse seasonal ranges by 10 to 15 percent, and bighorn sheep winter/spring range by about 30 to 40 percent. No appreciable change in antelope habitat quality (-9%) is foreseen. Overall elk habitat quality is projected to decline 40 to 50 percent.

The deer population could increase by about 1,000 animals (+13%). Bighorn sheep could increase by about 120 (+590%). No significant change in either sage grouse or antelope populations levels is expected. A substantial loss of about 800 elk (-40%) could occur under this alternative.

Forested nongame habitat quality could decline by about 70 percent. No appreciable change in nonforested nongame habitat is predicted.

Impacts to Fisheries Habitat

Impacts and conclusions would be identical to those described for Alternative D.

Impacts to Water Quality, Watershed, and Soils

Impacts and conclusions would be similar to those described for Alternative D. The 27,281 acres of range land improvements and 3,818 acres of wildlife improvements would cause surface disturbance and potential gullying in the short term. Over the long term, 25 acres of rangeland and 11 acres of wildlife improvements would cause increased soil compaction and bulk density and reduced vegetation cover, soil tilth, and porosity. See Table 4-2 for a detailed breakdown of acreages.

Land transfers through the Desert Land Act would involve a maximum of 5,310 acres of Class III or better soils. Adverse impacts associated with the transfer of public land under the Desert Land Act may include the potential for accelerating soil erosion and stream sedimentation and the loss of public resource values, primarily riparian areas.

Impacts to Riparian Habitat

Impacts and conclusions would be identical to those described for Alternative D.

Impacts to Recreation Uses and Visual Quality

The quantity of recreation opportunities available on 11,815 acres in the three special recreation management areas (SRMAs) would be increased 69 percent. Upgrading the Salmon River SRMA to a permanent Class I VRM area (from an interim Class I) would virtually eliminate all surface disturbing activities except those absolutely required for recreation management or public safety. The level of change to the existing landscape should remain very low (Appendix F). Withdrawing 106.75 acres from mineral entry to protect existing and future developed recreation sites within the Salmon River SRMA would reduce the amount of land available for mineral development by .02 percent of the planning area.

The visual quality of the Continental Divide National Scenic Trail corridor could deteriorate significantly along 15 miles of trail because of timber harvest and woodland product sales. Visual resource management goals for this alternative would allow surface and vegetation modifications that would be noticeable or even attract viewer attention. The intent of Congress in establishing a national scenic trail would be reversed.

The visual quality and lineal integrity of the Lewis and Clark SRMA would be retained by the VRM Class II designation and a mineral entry withdrawal of 2,810 acres. The effect of the mineral entry withdrawal would be the elimination of future mining activities within the SRMA.

The number of developed recreation sites would increase 28.6 percent with the construction of two new sites. These developments would help meet approximately 5 percent of the projected camping and picnicking facility needs for Lemhi County (1983 Statewide Comprehensive Outdoor Recreation Plan). All of BLM's developed facilities would be protected by mineral withdrawals. The cumulative effect of the recreation-oriented mineral entry withdrawals (new and existing) in this alternative would be withdrawal of 0.7 percent (3,279 acres) of the planning area.

The variety of dispersed recreation opportunities as represented by the Recreation Opportunity Spectrum (ROS) classes would be reduced 60 percent. Three ROS classes (primitive, semi-primitive nonmotorized, and semi-primitive motorized) would be completely eliminated because of eventual road building and other developments associated with timber harvest and mining.

Opportunities for off-road vehicles (ORV) recreation could increase 5.4 percent with the Eighteenmile WSA being opened to vehicular use. However, the actual increase in ORV opportunities is probably closer to 1 percent because steep and rocky terrain would make most of the WSA inaccessible to vehicles.

Motorized use would continue to occur randomly throughout the resource area and remain at nearly the current level. Use would be relatively light in most areas, with heavier activity occurring along the Salmon River.

Recreation opportunities would remain secure on lands retained in federal ownership. Public recreation uses would be eliminated on lands that were disposed of, unless they were transferred to another public agency. The proposed disposals would have a low impact on recreation use because most of the land parcels are small and inaccessible to public use. The one exception to this is an 1,800-acre antelope hunting area near the junction of the Eighteenmile and Hawley Creek roads.

Mining and mineral leasing activities could impact dispersed recreation by disrupting the natural appearance of the landscape and by shifting the recreation opportunity setting from the more natural appearing to the rural type. However, since the extent, location, and nature of future operations is not known, the actual impacts cannot be predicted. The removal of timber and associated activities such as road building would have a tendency to shift recreation opportunities to less primitive forms. Hunting would increase with better vehicle access, as would motorized recreation and wood gathering.

Conclusion: The complete elimination of primitive, semi-primitive nonmotorized, and semi-primitive motorized recreation opportunities would result in a significant adverse impact. However, an increase of 28.6 percent in developed sites would meet 5 percent of Lemhi County's camping and picnicking needs. The new sites along the Salmon River would be especially beneficial in meeting recreation needs.

Impacts to Wilderness Values

The existing wilderness characteristics would be lost because of a management emphasis on the harvest of commercial timber. Since the actual location of future roads and cutting units is not known or predictable with any accuracy at this time, site-specific analysis is not possible. However, the location of the commercial stands of timber in the heart of the wilderness study area (WSA) makes it apparent that any harvest would greatly alter the existing environment and introduce a significant level of road construction and vegetation manipulation. This would result in a loss of the existing opportunities for solitude and primitive recreation on 12,283 acres.

Conclusion: Wilderness values would be adversely affected on 59 percent (14,753 acres) of the WSA. Wilderness values on 41 percent (10,169 acres) would be subject to loss but no adverse activities are anticipated.

Impacts to Cultural Resources

This alternative is less favored than Alternatives C, F, or G for cultural resources. The significant increase in land transfer acreage drops this alternative below Alternative F or G, even though more beneficial cultural actions are proposed.

Impacts to cultural resource sites from dispersed activities should increase slightly because of a projected increase of 4 percent for livestock use levels (see general impacts under Alternative A). This would result in an increase in surface erosion for many allotments and create detrimental effects on a number of cultural resource sites. Range projects would affect 27,281 acres and wildlife projects are planned on 3,818 acres. Land transfers would increase from a total of 6,088 acres under the existing situation to 10,397 acres under this alternative.

Six areas of cultural resource would be protected by special management and activity plans identifying appropriate protective measures.

Conclusion: Impacts to cultural resources should significantly increase because of a significant increase in acreage proposed for land transfer and range projects. However, six valuable cultural areas would be protected.

Impacts to Economic Factors

Crop Agriculture

With this alternative there would be 5,310 acres of agricultural development. The total sales would be $1,079,576, which would translate into direct income of $50,524. This would be 15 percent of current crop agriculture personal income. Total income resulting from this level of development would be $105,408. This is 0.2 percent of 1982 Lemhi County personal income.

The estimated gain in direct employment is 11.5 jobs or 27 percent of current crop agriculture employment. Total employment gain would be 19.5 jobs, which is 0.3 percent of the 1982 Lemhi County total employment. An example of the calculations made in this section can be found in Appendix H.

Livestock (Meat Animals)

The initial stocking level with this alternative would be 2,952 AUMs less than the existing situation. Total sales would decrease by $64,058, resulting in an decrease in direct income of $1,787. This would be less than 0.1 percent of current permittees' personal income. Total income decrease would be $6,506, which is less than 0.1 percent of 1982 Lemhi County personal income. Over time, AUMs would be gained, so that by the end of 20 years there would be 2,924 more AUMs than are currently being used. Total sales by the end of 20 years would increase by $63,451, which would convert to direct income gain of $1,770. This would represent less than 0.1 percent of current permittees' personal income. Total income increase would be $6,445, which is less than 0.1 percent of total 1982 Lemhi County income.

The initial stocking level would result in 0.4 jobs being lost in the meat animal sector of the economy. This would be 0.2 percent of current permittees' employment. The total employment decrease would be 1.1 jobs, which is less than 0.1 percent of the 1982 Lemhi County total employment. In the long term direct employment gains would be 0.4 jobs (0.2 percent of current permittee employment), while total employment losses would be 1.2 jobs (less than 0.1 percent of 1982 Lemhi County total employment).

Active preference would decrease by 8,433 AUMs (if active preference is adjusted to match up with actual use). This would translate into a loss of capital value of between $475,762 and $2,108,250. (See Appendix H for an example of the calculations made in this section.)

Recreation

Although recreation is a fairly significant segment of the Lemhi County economy (see Chapter 3, Economic Conditions), the various alternatives proposed in this RMP are not expected to impact visitor use in any measurable way. Thus, no changes from the existing situation are predicted.

Lumber and Wood Products

The present allowable cut (1.07 million board feet per year) is expected to remain constant through all alternatives in this RMP. Thus, no changes from the existing situation are predicted.

Management Costs

Management costs would increase significantly with this alternative. Activity planning costs of $555,200 and project development costs of $1,042,237 would be incurred with this alternative. Table 4-20 shows these costs by type. These are total costs and would be spread over the 20 year life of the RMP.

TABLE 4-20
MANAGEMENT COSTS
Alternative E

Resource	Activity Plans	Project Dev.	Total
Range	$416,340	$ 787,947	$1,204,287
Wildlife	22,500	76,890	99,390
Recreation	25,000	20,000	45,000
Watershed	10,400	140,400	150,800
Cultural	81,000	17,000	98,000
TOTALS	$555,240	$1,042,237	$1,597,477

Revenue Generation

Over the 20 year life of this RMP there would be approximately $554,800 in revenues generated on an annual basis. This is roughly 14 percent than the revenues generated in fiscal year 1984. This is primarily due to the fact that 2.7 million board feet of timber were sold that year versus the 1.07 million board feet projected on an annual basis over time. Table 4-21 shows the source of the revenues generated under this alternative.

TABLE 4-21
REVENUES GENERATED
Alternative E

Category	Amount
Grazing Fees	$ 70,900
Mineral Leasing	410,000
Land Sales	38,200
Timber Sales	35,200
Recreation Fees	500
TOTAL	$554,800

Receipts to State and Local Governments

The average annual receipts to state and local governments would be $482,500, which is 1 percent greater than was received in fiscal year 1984. This is due largely to the fact that there was a 5 percent reduction in payments in-lieu-of-taxes in fiscal year 1984, while the values estimated here are the total estimated payment (with no reductions). Table 4-22 shows the estimated receipts under this alternative.

TABLE 4-22
RECEIPTS RECEIVED
Alternative E

Type of Receipt	State of Idaho	Lemhi County	Total
In-Lieu-of-Taxes	$ 0	$264,900	$264,900
Grazing Fees	0	8,900	8,900
Mineral Royalties	184,500	20,500	205,000
Land Sales	1,900	0	1,900
Timber Sales	1,800	0	1,800
TOTAL	$ 188,200	$294,300	$482,500

This level of revenues for Lemhi County would represent 19 percent of the county's fiscal year 1984 total revenues.

Conclusion: This alternative would have little economic impact on Lemhi County. The total increases in income and employment by the end of 20 years would be $111,900 and 20.7 jobs. This would represent 0.2 percent of the 1982 Lemhi County total personal income and 0.7 percent of employment. The greatest impact would be on capital value, which would be decreased by as much as $2.1 million. Management costs would increase dramatically, with a total of $1.6 million being spent on activity planning and project development over the 20-year life of the RMP. Total revenues generated would decline slightly to $554,800, while receipts received by state and local governments would increase slightly to $482,500.

ALTERNATIVE F

Impacts from Lands Actions

The classification for retention under the Classification and Multiple Use Act would be canceled throughout the planning area. Under this alternative, 5,835 acres would be identified for potential transfer from Federal ownership. The remainder of the public land in the planning area would be retained. The lands identified for potential disposal have met screening criteria (see pages 39-41 of the Draft Resource Management Plan) that nearly eliminate the likelihood of significant adverse environmental impacts. Therefore, no significant impact is expected from cancellation of the retention classification.

Impacts to Energy and Mineral Availability

Compared to Alternative A, this alternative would result in a 20.4 percent decrease in lands available for oil and gas leasing with standard stipulations, a decrease of 7.4 percent in lands with seasonal occupancy restrictions,and an increase of 141 percent in lands with a no surface occupancy stipulation. A total of 14,796 acres would be closed to oil and gas leasing.

There would be a 20.9 percent decrease in lands available for geothermal leasing with the standard stipulations, a 7.4 percent decrease in lands available with seasonal occupancy restrictions, and a 141 percent increase in lands available for geothermal leasing only with a no surface occupancy stipulation. A total of 15,596 acres would be closed to geothermal leasing.

Solid mineral leasing would be permitted on 21.1 percent less land with standard stipulations and on 7.3 percent less land with seasonal occupancy restrictions. About 190 percent more lands would be closed to solid mineral leasing under this alternative.

There would be a 3.5 percent decrease in lands open to mineral location and a 706 percent increase in lands withdrawn from mineral entry. Approximately 96 percent of the planning area would remain open for appropriation under the mining laws.

There would be a decrease of 14.5 percent in lands open for mineral material disposals and an increase of 237 percent in lands closed to mineral material disposals. However, approximately 80.6 percent of the planning area would remain open for mineral material disposals.

The seasonal occupancy restrictions on mineral leasing would not significantly limit exploration and development. However, under the no surface occupancy stipulation, about 12,720 acres would not be accessible for fluid mineral exploration and development because they would be beyond the reach of directional drilling using present technology. This represents approximately 2.7 percent of the planning area. All of this land is considered prospectively valuable for oil and gas. Approximately 2,080 acres (16 percent) of this is also prospectively valuable for geothermal resources and represents about 5 percent of the lands reported to be prospectively valuable for geothermal resources within the planning area.

In addition, 14,796 acres would be closed to oil and gas leasing and 15,596 acres would be closed to geothermal leasing. All of the lands that would be closed to oil and gas leasing are prospectively valuable. Approximately 800 acres of the lands which would be closed to geothermal leasing are reported as prospectively valuable.

Of the 92,165 acres that would be closed to solid mineral leasing, 1,580 acres (1.7 percent) have potential for phosphate development. While small when compared to the total size of the planning area, this represents about 30.9 percent of the lands within the planning area that have known phosphate potential. Approximately 19.4 percent of the planning area would be closed to solid mineral leasing under this alternative.

The potential for development of locatable minerals is moderate on 16.4 percent of the lands that would be withdrawn under this alternative. The remaining withdrawn lands have low potential. The lands withdrawn represent approximately 4 percent of the planning area and approximately 1.6 percent of the moderate potential lands. There does not appear to have been any significant exploration activity on most of the lands that would be withdrawn under this alternative.

Mineral material disposals would still be allowed on 80.6 percent of the planning area. Mineral materials are widespread throughout the area, so ample reserves would still be available for use. With the exception of the river corridor and the Eighteenmile Wilderness Study Area (WSA), most of the closures would be small and material could be obtained from adjacent, open lands. This may require some longer haul distances and could increase in the delivered price of the material.

Because of the remoteness of the Eighteenmile WSA, there has been little demand for mineral material from this area. Significant demand for mineral materials, mainly rip-rap, undifferentiated fill, and sand and gravel, exists within the proposed Salmon River corridor. Existing sites would be preserved under this alternative but no new sites would be allowed. This may result in longer haul distances when material is not available near the proposed use. In the past, the state highway and county road departments have preferred to establish crusher sites, stockpile material, and then haul up to 25 miles, rather than develop several smaller pits with shorter haul distances. If this use pattern continues, the existing sites should be adequate to handle the demand for the foreseeable future without the need for additional mineral material sites within the river corridor. Additional material could be obtained, if necessary, from pits located along tributary drainages beyond the boundaries of the Salmon River corridor.

Conclusion: The adverse impacts on the availability of lands for exploration and development of solid and fluid leasable minerals would be slight except for lands thought to have value for phosphate, where the impact would be moderate. The adverse impact on the availability of lands for exploration and development of locatable minerals and mineral materials would be slight except within the Salmon River corridor, where the impact would be moderate. All forms of mineral exploration and development would be foregone that portion of the Eighteenmile WSA that would be recommended for inclusion within the National Wilderness System.

Impacts to Timber Yield and Availability

The present sustained yield allowable cut for the planning area is approximately 10.71 million board feet per decade. This harvest level must be maintained through Fiscal Year 1988, when a new 10-year allowable cut will be computed. The set-asides and withdrawals in this alternative would reduce the available commercial forest and base. Multiple-use restrictions would further reduce potential timber production and yield. These set-asides and restrictions would enter into the new allowable cut computation in 1988 and would decrease the harvest level accordingly

Harvest practices such as clearcut, shelterwood, and selective cut would influence vegetation cover on approximately 300 acres each year. These harvest activities would benefit forest resources by regenerating the stand, reducing insects and disease through removal of infected trees, and improving growth and production of residual trees.

Forest development practices such as thinning, planting, and use of herbicides would be implemented on available commercial forest lands. These techniques would improve stocking levels and growth rates, and decrease insect and disease problems.

Under this alternative, 90 acres of suitable commercial forest land would be set-aside from the timber production base to ensure protection of recreation values within the planning area. Another 1,354 acres would be set-aside for protection of designated wilderness. Approximately 3,131 acres of woodland would be closed to woodland product sales within these same areas to aid in preservation of the visual quality of the existing landscape. The anticipated impacts of these set-asides and closures are shown in Table 4-23.

TABLE 4-23
SET-ASIDES AND CLOSURES

	Suitable CFL[1] Set-Aside		Woodland Closures		Loss in Harvestable
Set-Aside	Acres	% of Total Suitable CFL	Acres	% of Total Woodland	Timber Yield MBF[2]/Year
Recreation Values	90	0.3	622	2.4	7 MBF/Year
Wilderness	1,354	4.5	2,509	9.5	109 MBF/Year
TOTALS	1,444	4.8	3,131	11.9	116 MBF/Year

[1] Commercial Forest Land
[2] Thousand Board Feet

Of the 28,865 acres of available commercial forest land, 5,156 acres would receive restricted management to reduce the impacts to crucial elk winter range. A 20 percent reduction in harvestable timber yield would be expected as a result of these measures.

An additional 581 acres of available commercial forest land would be restricted to maintain the visual qualities of the existing landscape along the 1/2-mile-wide Continental Divide Trail corridor. Maintaining a Class III VRM classification in this area would result in a 10 percent reduction in harvestable timber yield from these restricted stands.

The impacts of implementing these restrictions are shown in Table 4-24.

TABLE 4-24
MULTIPLE USE RESTRICTIONS

Restriction	Suitable CFL[1] Restrictions Acres	% of Total Available CFL	Loss in Harvestable MBF[2]/Year (Timber Yield)
Elk Winter Range	1,179	4.1	19 MBF/Year
Continental Divide National Scenic Trail	581	2.0	5 MBF/Year
TOTALS	1,760	6.1	24 MBF/Year

[1] Commercial Forest Land
[2] Thousand Board Feet

Intensive management of the 28,865 acres of available commercial forest land would enable the planning area to support its present sustained yield allowable cut of 10.71 million board feet per decade. Management of the 23,138 acres of available woodland would increase the production of non-sawtimber products such as firewood and Christmas trees.

Conclusion: The adverse impact on timber yield and on the availability of commercial forest lands and woodlands would be only slightly significant under this alternative. Nearly 5 percent of the suitable commercial forest land in the planning area would be unavailable for timber harvest. Approximately 12 percent of the woodland within the planning area would be closed to woodland product sales. About 6 percent of the available commercial forest land would be subject to harvesting and management restrictions to protect crucial elk winter range. Loss in harvestable timber yield as a result of these set-asides and restrictions would total approximately 140,000 board feet per year.

Impacts to Livestock Grazing

Under this alternative the initial stocking level would be 43,602 AUMs. This represents a 32 percent reduction from active preference and 19 percent reduction from the 5-year average use. The long-term stocking level would be 52,632 AUMs. This would be 18 percent below active preference and 2 percent below the 5-year average use. There are 5,182 acres that would be transferred to private ownership. This would result in the loss of 760 AUMs. Six allotments allotments would be eliminated and 28 allotments could be reduced.

Conclusion: Under this alternative, the short-term 19 percent reduction relative to the 5-year average use would be significantly adverse to livestock operations. The long-term 2 percent reduction would not be significant.

Impacts to Range Vegetation

There would be approximately 22,700 acres of brush control, 4,400 acres of seedings, 36 water developments, and 63 miles of fence. Brush control would change 22,700 acres of low good and high fair range condition to good. The seedings would change 4,400 acres of low fair and poor condition range to disturbed condition.

The long-term ecological condition is expected to be 3 percent excellent, 66 percent good, 20 percent fair, 10 percent unmapped, and 1 percent disturbed.

The long-term trend is expected to be 11 percent upward, 80 percent static, and 9 percent downward. Brush control and seeded areas would be expected to stabilize and remain static in trend. The downward trend areas would continue to decline as undesirable plant species density continued to increase. However, range improvements and intensive management, including appropriate season of use and livestock distribution changes, should allow for the long-term stocking rates under this alternative while maintaining the long-term ecological range condition.

Conclusion: Good ecological condition range would increase from 61 to 66 percent, resulting in a moderately beneficial impact.

Impacts to Crucial Wildlife Habitats

Approximately 44 percent of unsatisfactory elk and bighorn range would improve to satisfactory. About 65 percent of the improvement would result from prescribed burning and 35 percent from improved ecological condition. Approximately 17 percent of unsatisfactory deer, antelope, and sage grouse range would improve to satisfactory. About 13 percent of this improvement would result from interseedings and 87 percent from improved ecological condition. A total of 19 percent of unsatisfactory nongame habitat would improve to satisfactory through interseedings (17 percent) and improved ecological condition (83 percent). Interseedings should produce benefits similar to those associated with improved ecological condition.

The rationale used for assessing the value of improved ecological condition and prescribed fire based on:

1. Nutritional diversity - Carpenter and Walmo 1981; Dasmann 1971; Nelson and Leege 1982; Yoakum 1980
2. Sage grouse habitat - Autenrieth et al. 1982
3. Nongame habitat - Shelford 1963; Dealey et al. 1981; Hanley and Page 1982
4. Habitat health and stability - Daubenmire 1979; Watt 1972
5. Prescribed fire - Elliot 1978; Kuntz 1982; Wright et al. 1979; Hobbs and Spowart 1984; Peek et al. 1979; Wolfe 1978

Eighty-eight percent of the water-deficient acreage would be improved through installation of eighteen 500-gallon guzzlers. More efficient range use by antelope (Copeland 1980), sage grouse, and nongame species is anticipated.

All of fences known or suspected of creating a hazard or movement problem for big game would be corrected. Though not quantifiable, fewer deaths, fewer injuries, and more efficient range use would be expected.

Restrictions on domestic livestock would allow for 73 percent of potential elk use to occur on elk winter range (Skovlin et al. 1968; Ralphs 1981). Timber management restrictions would guarantee preservation of escape and thermal cover qualities of 32 percent of the commercial timber acreage associated with crucial elk winter range (Ralphs 1981).

No surface occupancy restrictions would preserve the physical characteristics of about 76 percent of the multiple species crucial areas. These restrictions would also help protect 38 percent of known raptor nest sites, 41 percent of known sage grouse strutting grounds, 57 percent of crucial elk winter range, and 100 percent of known burrowing owl habitat.

Mineral activity seasonal use restrictions on all other important seasonal ranges would allow optimal habitat utilization by various species, preserve traditional dispersion patterns, and minimize potentially damaging effects of human induced stress (Selye 1950; Wynne-Edwards 1972). Human induced stress is discussed more fully under Alternative D.

The following percentages of combined state/private land needed to preserve crucial habitats would come into federal ownership: antelope migration corridor, 100 percent; antelope/deer crucial winter range, 100 percent; and elk breeding area, 100 percent.

None of the lands scheduled for transfer appear to have significant wildlife value. They would however, receive detailed scrutiny through the environmental assessment process.

An additional 63 miles of new fence construction would raise fence density to .58 mile per square mile. This would result in an 18 percent increase in potential hazard levels (Oakley 1973; Paper 1976) and movement problems (Urness 1976; Adams 1982) for big game animals. The ultimate effect on health or population levels of various species would certainly be adverse but cannot be quantified.

Brush control proposed for livestock management would effectively eliminate 2 percent of sage grouse winter/nesting habitat, 3 percent of crucial deer winter range, and 5 percent of antelope winter range. Five percent of elk winter/spring range would benefit.

The effects of proposed water developments cannot be predicted at this time. These developments would be evaluated through the environmental assessment process at the project level.

Forage reservations for big game under this alternative would allow for the following percent increases: deer, 35 percent; elk, 11 percent; antelope, 5 percent; and bighorn sheep, 900 percent.

This alternative would allow the Department of Idaho Fish and Game population targets for big game to be met. It would also put habitat integrity on a firmer foundation.

Conclusion: Habitat quality of deer fall/winter/spring range would be expected to improve by about 30 to 40 percent, elk winter/spring range by about 10 to 20 percent, bighorn sheep winter/spring range by 30 to 40 percent, and sage grouse and antelope seasonal ranges by about 10 to 15 percent.

Improved habitat quality could contribute to an increase in the deer population of about 2,600 animals (+35%) and the bighorn population of about 200 (+869%). A moderately significant increase of 500 sage grouse (+15%) and 200 elk (+11%) could also occur. No significant change in the antelope populations (+5%) is anticipated.

No significant change in forested nongame habitat quality is expected. A substantial (+25%) improvement in nonforested nongame habitat quality could occur.

Impacts to Fisheries Habitat

This alternative would improve 3.0 miles of McDevitt Creek and 2.75 miles of Sevenmile Creek. Improvement to McDevitt Creek would be accomplished by limiting livestock grazing to a maximum of 50 percent forage utilization. This would allow improvement of many of the important physical stream characteristics that ultimately would improve the riparian aquatic habitat. Annual and woody riparian vegetation, streambank stability, and cover would be expected to improve.

Sevenmile Creek is a high gradient stream with a watershed and stream channel in very poor condition. Total livestock elimination from the perennial stream channel, with its highly erosive soils and important riparian areas, would allow an increase of soil-holding vegetation and eliminate mechanical damage to the stream channel by livestock trampling. Elimination of grazing would enhance riparian plant species abundance and diversity, increase watershed stability, reduce erosion, and improve streambank stability. The net result would be a more stable watershed, with less erosion and subsequent siltation into the Salmon River.

Conclusion: Slight overall improvement of fisheries habitat would occur under this alternative. Livestock grazing restrictions and modifications would be responsible for this.

Impact to Water Quality, Watershed, and Soils

A total of 1,494 acres of watershed presently in unsatisfactory condition is expected to improve to satisfactory condition. This represents only 7 percent of the total unsatisfactory watershed condition. This figure may seem low, especially when compared to the amount of range condition improved. However, it must be remembered that areas typically in unsatisfactory watershed condition are in low precipitation areas and have a large percentage of bentonitic soils. These areas would be the last to respond to management changes. Considering that these areas are the product of over a half century of overuse, any improvement over a 15- to 20-year period is going to be limited.

With the limited grazing and resulting increase in forage production, the 59,399 acres of highly erosive soils would regain substantial vegetation cover. Most of the 5,028 acres of bentonite would maintain low vegetative cover protection; however, some of it would regain cover and be better protected.

The 27,281 acres of rangeland improvements and 7,547 acres of wildlife improvements would cause surface disturbances and potential gullying in the short term. Over the long term, 25 acres of rangeland improvements and 22 acres of wildlife improvements would cause increased soil compaction and bulk density around watering devices and along fences and reduced soil tilth and porosity. See Table 4-2 for detailed break-down of acreages.

Land transfers through the Desert Land Act would involve a maximum of 1,340 acres of Class III or better soils. Adverse impacts associated with the transfer of public land under the Desert Land Act may include the potential for accelerating soil erosion and stream sedimentation and the loss of public resource values, primarily riparian areas.

Timber sale activities would result in the same impacts that are described for Alternative A.

Conclusion: A slight decline in overall soil and water quality and watershed condition would occur under this alternative. Adverse impacts associated with timber harvest activities would outweigh benefits resulting from modifications to and restrictions on livestock grazing.

Impacts to Riparian Habitat

Under this alternative, riparian condition would be improved to excellent condition on 225 acres where livestock were totally excluded. The condition on an additional 275 acres of riparian area would improve through livestock management.

Riparian areas commonly make up only 1 to 2 percent of a grazing allotment; however, they provide 3 to 16 times as much forage as adjacent uplands, are exposed to domestic animal stocking rates 5 to 30 times those of adjacent uplands, and may provide as much as 80 percent of all the forage actually grazed from an allotment (Bedell 1984).

Proposed stocking rates under this alternative would effectively reduce livestock pressure on riparian areas from current utilization levels of 70 to 90 percent to 60 to 80 percent. Livestock preference for riparian areas would not change, however. Therefore, as previously stated, most livestock use would still come from riparian areas.

Overall reduction in livestock numbers would improve water quality by reducing the amount of coliform bacteria. Other parameters affecting riparian area quality would remain at present levels. These include:

1. Higher than normal stream temperatures resulting from a lack of sufficient woody streamside cover
2. Silt (sediment) in the channel from bank and upland erosion
3. Wide channels from hoof-caused bank sloughing and later erosion by water
4. Structure of the water column and the channel it flows in.
5. Quality of riparian vegetation.
6. Water table affecting riparian areas.

Conclusion: Livestock grazing restrictions and modifications would result in a slight improvement in overall riparian area condition. Thirteen of the fourteen riparian areas listed in Table 3-5 as "most in need of improvement," would improve to some degree. (See Appendix Table D-2.)

Impacts to Recreation Uses and Visual Quality

The quantity of recreation opportunities available on 18,085 acres in the three special recreation management areas (SRMAs) would be increased 160 percent. The Salmon River and Lewis and Clark SRMAs would retain their existing visual qualities as visual resource management areas Class II (13,485 acres). Within the Continental Divide SRMA, visual qualities would be retained on the 75 acres of Class II managed area but could be lost on the 4,525 acres of Class III managed area. All potential surface disturbing uses on 75 acres would be limited by the Class II management guidelines; the degree of visual change could not be noticeable to the average viewer and the level of change to the existing landscape should not exceed low (Appendix F).

Setting aside 75 acres of commercial timber land and restricted harvesting practices on 4,525 acres would minimally protect the scenic values immediately adjacent to the Continental Divide National Scenic Trail. No timber cutting would occur within a corridor 100 feet on either side of the trail's treadway. Within the next 1,220 feet, timber sales would be laid out to minimize the visual impact to trail users. No specific cutting units have been identified as yet. Withdrawal of 1,820 acres from mineral entry within the Lewis and Clark SRMA would reserve a minimal treadway, ensuring the continuity of the approximately 15 miles of trail on public lands.

Number of developed recreation sites would increase 28.6 percent with the construction of two new sites. These developments along with improvement in existing facilities would help meet approximately 5 percent of the projected camping and picnicking facility needs for Lemhi County (1983 Statewide Comprehensive Outdoor Recreation Plan). All of BLM's developed facilities would be protected by mineral entry withdrawals. The cumulative effect of the recreation-oriented mineral entry withdrawals (new and existing) in this alternative would be withdrawal of 0.51 percent (2,364 acres) of the planning area.

Dispersed recreation opportunities and off-road vehicle (ORV) use would continue as in Alternative A. An ORV closure of the wilderness area following Congressional designation (14,796 acres) would have no impact on ORV recreation since the area is now considered a roadless area with no ORV opportunities or existing use. The portion of the wilderness study area not recommended for wilderness could provide additional ORV opportunities, but the area is so steep and rocky that any gains would be minimal.

Motorized use would continue to occur randomly throughout the resource area and remain at nearly the current level. Use would be relatively light in most areas, with heavier activity occurring along the Salmon River.

Recreation opportunities would remain secure on lands retained in federal ownership. Public recreation uses would be eliminated on lands that were disposed of, unless they were transferred to another public agency. The proposed disposals would have a low impact on recreation use because most of the land parcels are small and inaccessible to public use. The one exception to this would be the 720 acres near the junction of State Highway 28 and Texas Creek, where antelope hunting occurs.

Mining and mineral leasing activities could impact dispersed recreation by disrupting the natural appearance of the landscape and shifting the recreation opportunity setting from the more natural appearing to the rural type. However, since the extent, location and nature of future operations is not known, the actual impacts cannot be predicted. In general, mineral leasing impacts would be lessened restrictions and stipulations on leasing activities.

The removal of timber and associated activities such as road building would have a tendency to shift recreation opportunities to less primitive forms. Hunting would increase with better vehicle access as would motorized recreation and wood gathering.

Conclusion: Existing use opportunities, particularly on the three SMRAs, would be enhanced. An increase of 28.6 percent in developed recreation sites would meet 10 percent of Lemhi County's camping and picnicking needs. The new sites along the Salmon River would be especially beneficial in meeting recreation needs. Wilderness designation's impact on ORV use would be insignificant.

Impacts to Wilderness Values

None of the wilderness values on 10,126 acres would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated for the next five years.

In the long-term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. Prospecting for phosphate is expected to occur on 1,920 acres, with development of a mine being likely if an economically feasible discovery was made. Known deposits occur just north of the wilderness study area. Two miles of road construction would probably be associated with the phosphate area. The wilderness value of naturalness would be lost on the 1,920 acres. The perception of naturalness would be essentially lost over an additional 200-acre area because the area of phosphate prospecting could be seen.

Renewed mining of gypsum in Clear Creek would impact the perception of naturalness on 300 acres adjacent to the mine. One mile of road construction is anticipated.

For the purpose of this analysis, it is assumed that two discoveries and lode claims would be made between Dry Canyon and Horse Thief Creek. Based on similar developments in the area, construction of one mile of road and 50 acres of surface disturbance is expected.

The wilderness value of naturalness would be adversely impacted on a total of 2,470 acres between Dry Canyon and Horse Thief Creek.

In addition to naturalness, activities associated with mineral development would adversely impact the wilderness value of solitude. Sights and sounds from traffic and construction related to the above development would lower the quality of solitude on 2,470 acres.

Sights and sounds from recreational off-road vehicle (ORV) use would have an adverse impact on solitude. However, this impact is expected to be negligible compared to mining activities since off-road vehicle use is estimated to be less than 25 visitor days annually (estimate by BLM personnel), and is expected to remain below 50 visitor days annually for the next 10 years.

Wilderness values on 14,796 acres would be protected by legislative mandate. Wilderness designation would withdraw these lands from mineral entry and eliminate the potential for future mineral development. Wilderness values of naturalness and solitude would benefit from this action.

An estimated 15 visitor days annually of off-road vehicle use would be eliminated from the wilderness portion of the wilderness study area. It is anticipated that all of this use would move to the nonwilderness portion of the wilderness study area. Although encounters between off-road vehicle users and other recreationists are infrequent with current levels of use, the elimination of off-road vehicle use would benefit the wilderness value of solitude because visitors would not encounter or hear off-road vehicle users in the area. Beneficial effects to naturalness from elimination of ORV use would be negligible since the level of use is already quite low.

Conclusion: Wilderness values would be adversely affected on 10 percent (2,470 acres) and retained on 59 percent (14,796 acres) of the WSA. Wilderness values on 31 percent (7,656 acres) would be subject to loss but no adverse activities are presently anticipated.

Impacts to Cultural Resources

This is the second best alternative for cultural resources. Impacts to cultural resource sites from dispersed activities should decrease slightly because of an anticipated 2 percent decrease in livestock use. Less erosion and surface modification and less damage to cultural resource site stratigraphy would result. Range projects are scheduled on 27,281 acres and wildlife projects are proposed for 7,547 acres (see general impacts under Alternative A).

Land transfers are proposed for a total of 5,795 acres. Impacts from land transfers would be reduced slightly from the existing rate under this alternative. Impacts from mineral activity should decrease because of a significant increase in acres closed to leasing and location.

Under this alternative, five areas of significant cultural resource sites including the Lewis and Clark Trail would have plans developed identifying protective measures.

Conclusion: This is the second most desirable alternative for cultural resources. Impacts to cultural resources from other activities, except for range improvement, should decrease slightly. Impacts from mineral activity should decrease significantly. Five significant cultural sites would be protected.

Impacts to Economic Factors

Crop Agriculture

With this alternative there would be 1,300 acres of agricultural development. The total sales would be $264,303 which would translate into direct income of $12,369. This would be 4 percent of current crop agriculture personal income. Total income resulting from this level of development would be $25,805. This is less than 0.1 percent of 1982 Lemhi County personal income.

The estimated gain in direct employment is 2.8 jobs, or 7 percent of current crop agriculture employment. Total employment gain would be 4.8 jobs, which is 0.2 percent of the 1982 Lemhi County total employment. An example of the calculations made in this section can be found in Appendix H.

Livestock (Meat Animals)

The initial stocking level with this alternative would be 8,939 AUMs less than the existing situation. Total sales would decrease by $193,976, resulting in an decrease in direct income of $5,412. This would be 0.3 percent of current permittees' personal income. Total income decrease would be $19,702, which is less than 0.1 percent of 1982 Lemhi County personal income. Over time, AUMs would be gained, so that by the end of 20 years there would be 91 more AUMs than are currently being used. Total sales by the end of 20 years would increase by $1,975, which would convert to direct income gain of $55. This would represent less than 0.1 percent of current permittees' personal income. Total income increase would be $201, which is less than 0.1 percent of total 1982 Lemhi County income.

The initial stocking level would result in 1.3 jobs being lost in the meat animal sector of the economy. This would be 0.5 percent of current permittees' employment. The total employment decrease would be 3.7 jobs, which is less than 0.1 percent of the 1982 Lemhi County total employment. In the long term there would be no employment gains.

Active preference would decrease by 11,266 AUMs (if active preference is adjusted to match up with actual use). This would translate into a loss of capital value of between $635,590 and $2,816,500. (See Appendix H for an example of the calculations made in this section.)

Recreation

Although recreation is a fairly significant segment of the Lemhi County economy (see Chapter 3, Economic Conditions), the various alternatives proposed in this RMP are not expected to impact visitor use in any measurable way. Thus, no changes from the existing situation are predicted.

Lumber and Wood Products

The present allowable cut (1.07 million board feet per year) is expected to remain constant through all alternatives in this RMP. Thus, no changes from the existing situation are predicted.

Management Costs

Management costs would increase significantly with this alternative. Activity planning costs of $573,700 and project development costs of $1,148,000 would be incurred with this alternative. Table 4-25 shows these costs by type. These are total costs and would be spread over the 20-year life of the RMP.

TABLE 4-25
MANAGEMENT COSTS
Alternative F

Resource	Activity Plans	Project Dev.	Total
Range	$416,340	$ 787,947	$1,204,287
Wildlife	50,000	161,800	211,800
Recreation	25,000	20,000	45,000
Watershed	10,400	161,200	171,600
Cultural	72,000	17,000	89,000
TOTALS	$573,740	$1,147,947	$1,721,687

Revenue Generation

Over the 20-year life of this RMP there would be approximately $544,400 in revenues generated on an annual basis. This is roughly 15 percent lower than the revenues generated in fiscal year 1984. This is primarily due to the fact that 2.7 million board feet of timber was sold that year versus the 1.07 million board feet projected on an annual basis over time. Table 4-26 shows the source of the revenues generated under this alternative.

TABLE 4-26
REVENUES GENERATED
Alternative F

Category	Amount
Grazing Fees	$ 65,000
Mineral Leasing	410,000
Land Sales	33,700
Timber Sales	35,200
Recreation Fees	500
TOTAL	$544,400

Receipts to State and Local Governments

The average annual receipts to state and local governments would be $481,700, which is 1 percent greater than was received in fiscal year 1984. This is due largely to the fact that there was a 5 percent reduction in payments in-lieu-of-taxes in fiscal year 1984, while the values estimated here are the total estimated payment (with no reductions). Table 4-27 shows the estimated receipts under this alternative.

TABLE 4-27
RECEIPTS RECEIVED
Alternative F

Type of Receipt	State of Idaho	Lemhi County	Total
In-Lieu-of-Taxes	$ 0	$265,100	$265,100
Grazing Fees	0	8,100	8,100
Mineral Royalties	184,500	20,500	205,000
Land Sales	1,700	0	1,700
Timber Sales	1,800	0	1,800
TOTAL	$ 188,000	$293,700	$481,700

This level of revenues for Lemhi County would represent 19% of the county's fiscal year 1984 total revenues.

Conclusion: This alternative would have little economic impact on Lemhi County. The total increases in income and employment by the end of 20 years would be $26,000 and 4.8 jobs. This would represent less than 0.1 percent of the 1982 Lemhi County total personal income and 0.1 percent of employment. The greatest impact would be on capital value, which would be decreased by as much as $2.8 million. Management costs would increase dramatically, with a total of $1.7 million being spent on activity planning and project development over the 20-year life of the RMP. Total revenues generated would decline slightly to $544,400, while receipts received by state and local governments would increase slightly to $481,700.

ALTERNATIVE G

Impacts from Lands Actions

The classification for retention under the Classification and Multiple Use Act would be canceled throughout the planning area. Under this alternative, 5,835 acres would be identified for potential transfer from Federal ownership. The remainder of the public land in the planning area would be retained. The lands identified for potential disposal have met screening criteria (see pages 39-41 of the Draft Resource Management Plan) that nearly eliminate the likelihood of significant adverse environmental impacts. Therefore, no significant impact is expected from cancellation of the retention classification.

Impacts to Energy and Mineral Availability

Compared to Alternative A, this alternative would result in a 19.5 percent decrease in lands available for oil and gas leasing with standard stipulations, a 7.3 percent decrease in lands with seasonal occupancy restrictions, and a 181 percent increase in lands covered by the no surface occupancy restriction. There would be no lands closed to oil and gas leasing under this alternative.

There would be a 20 percent decrease in lands available for geothermal leasing with the standard stipulations, a 7.3 percent decrease in lands with seasonal occupancy restrictions, and a 181 percent increase in lands which could be leased only with the no surface occupancy stipulation. A total of 800 acres would be closed to geothermal leasing.

There would be a 20 percent decrease in lands available for solid mineral leasing with the standard stipulations and a 7.3 percent decrease in lands which would be leased with seasonal occupancy restrictions, along with an increase of 169 percent in lands that would be closed to solid mineral leasing.

There would be a 0.4 percent decrease in lands open to mineral location and a 75.8 percent increase in lands that would be withdrawn from the operations under the mining laws. Approximately 99.1 percent of the planning area would be open for mineral location.

There would be a 214 percent increase in lands closed to mineral material disposals. However, approximately 81 percent of the planning area would remain open for mineral material disposals.

The seasonal occupancy restrictions on mineral leasing would not significantly limit exploration and development. However, under the no surface occupancy stipulation, about 22,196 acres would not be accessible for fluid mineral exploration and development using present directional drilling technology. This represents approximately 4.7 percent of the planning area. All of this acreage is considered prospectively valuable for oil and gas.

About 2,080 acres of this is also prospectively valuable for geothermal resources. An additional 800 acres of prospectively valuable geothermal lands would be closed to leasing for recreational development. Approximately 7 percent of the lands reported as prospectively valuable for geothermal resources would not be available for exploration and development.

Of the 85,535 acres (18 percent of the planning area) that would be closed to solid mineral leasing, 1,580 acres has potential for phosphate development. This acreage represents about 30.8 percent of the lands within the RMP area known to have phosphate potential.

The potential for discovery or development of locatable minerals is moderate on 75 percent of the lands which would be withdrawn under this alternative. The remaining 25 percent of the withdrawn lands has low potential. The lands withdrawn represent about 0.9 percent of the planning area and approximately 2.1 percent of the moderate potential lands. There does not appear to have been any significant exploration activity on most of the lands that would be withdrawn under this alternative.

Mineral material disposals would be allowed on 81 percent of the planning area. Mineral materials are widespread throughout the area, so ample reserves would still be available for use. With the exception of the river corridor and the Eighteenmile Wilderness Study Area (WSA), most of the closures would be small and material could be obtained from adjacent, open lands. This may require some longer haul distances and could increase the delivered price of the material.

Because of the remoteness of the Eighteenmile WSA, there has been little demand for mineral material from this area. Significant demand for mineral materials, mainly rip-rap, undifferentiated fill, and sand and gravel, exists within the proposed Salmon River corridor. Existing sites would be preserved under this alternative but no new sites would be allowed. This may result in longer haul distances when material is not available near the proposed use. In the past, the state highway and county road departments have preferred to establish crusher sites, stockpile material, and then haul up to 25 miles, rather than develop several smaller pits with shorter haul distances. If this use pattern continues, the existing sites should be adequate to handle the demand for the foreseeable future without the need for additional mineral material sites within the river corridor. Additional material could be obtained, if necessary, from pits located along tributary drainages beyond the boundaries of the Salmon River corridor.

Conclusion: The adverse impact on the availability of lands for exploration and development of solid and fluid leasable minerals would be slight except for lands thought to have value for phosphate, where the impact would be moderate. The adverse impact on the availability of lands for exploration and development of locatable minerals and mineral materials would be slight except within the Salmon River corridor, where the impact would be moderate.

Impacts to Timber Yield and Availability

The present sustained yield allowable cut for the planning area is 10.71 million board feet per decade. This harvest level must be maintained through Fiscal Year 1988, when a new 10-year allowable cut will be computed. The set-asides in this alternative would reduce the available commercial forest and base. Multiple-use restrictions would further reduce potential timber production and yield. These set-asides and restrictions would enter into the new allowable cut computation in 1988 and would decrease the harvest level accordingly.

Harvest practices such as clearcut, shelterwood, and selective cut would influence vegetation cover on approximately 300 acres each year. These harvest activities would benefit forest resources by regenerating the stand, reducing insects and disease through removal of infected trees, and improving growth and production of residual trees.

Forest development practices such as thinning, planting, and use of herbicides would be used on available commercial forest lands. These techniques would improve stocking levels and growth rates and decrease insect and disease problems.

Under this alternative, 90 acres of suitable commercial forest land would be set-aside from the timber production base to ensure protection of recreation values within the planning area. Another 1,257 acres would also be set-aside for protection of recreational opportunity spectrum (ROS) classes. Approximately 2,933 acres of woodland would be closed to woodland product sales within these same areas to aid in preservation of the visual quality of the existing landscape. The anticipated impacts of these set-asides and closures are shown in Table 4-28.

TABLE 4-28
SET-ASIDES AND CLOSURES

	Suitable CFL Set-Aside		Woodland Closures		Loss in Harvestable Timber Yield MBF/Year
Set-Aside	Acres	% of Total Suitable CFL	Acres	% of Total Woodland	
Recreation Values	90	0.3	622	2.4	7 MBF/Year
ROS Classes	1,257	4.1	2,311	8.8	101 MBF/Year
TOTALS	1,347	4.4%	2,933	11.2%	108 MBF/Year

Of the 28,962 acres of available commercial forest land, 1,179 acres would receive restricted management to reduce the impacts to crucial elk winter range. A 20 percent reduction in harvestable timber yield would be expected as a result of these measures.

An additional 581 acres of available commercial forest land is also restricted to maintain the visual qualities of the existing landscape along the 1/4-mile-wide Continental Divide Trail corridor. Maintaining a Class III VRM classification in this area would result in an 10 percent reduction in harvestable timber yield from these restricted stands.

The impacts of implementing these restrictions as shown in Table 4-29.

TABLE 4-29
MULTIPLE USE RESTRICTIONS

	Suitable CFL Restrictions		Loss in Harvestable MBF/Year (Timber Yield)
Set-Aside	Acres	% of Total Available CFL	
Elk Winter Range	1,179	4.1	19 MBF/Year
Continental Divide National Scenic Trail	581	2.0	5 MBF/Year
TOTALS	1,760	6.1	24 MBF/Year

Intensive management of the 28,962 acres of available commercial forest land would enable the planning area to support its present sustained yield allowable cut of approximately 10.71 million board feet per decade. Management of the 23,336 acres of available woodland would increase the production of non-sawtimber products such as firewood and Christmas tree.

Conclusion: The adverse impact on timber yield and on the availability of commercial forest lands and woodland would be only slightly significant under this alternative. Over 4 percent of the suitable commercial forest land in the planning area would be unavailable for timber harvest. Approximately 11 percent of the woodland within the planning area would be closed to woodland product sales. About 6 percent of the available commercial forest land would be subject to harvesting and management restrictions to protect crucial elk winter range. Loss in harvestable timber yield as a result of these set-asides and restrictions would total approximately 132,000 board feet per year.

Impacts to Livestock Grazing

Impacts and conclusions would be identical to those described for Alternative F.

Impacts to Range Vegetation

Impacts and conclusions would be identical to those described for Alternative F.

Impacts to Crucial Wildlife Habitats

Impacts and conclusions would be identical to those described for Alternative F.

Impacts to Fisheries Habitat

Impacts and conclusions would be identical to those described for Alternative F.

Impacts to Riparian Habitat

Impacts and conclusions would be identical to those described for Alternative F.

Impacts to Water Quality, Watershed, and Soils

Impacts and conclusions would be identical to those described for Alternative F.

Impacts to Recreation Uses and Visual Quality

Impacts and conclusions would be identical to those described in Alternative F, with one exception. Only 12,614 acres would be closed to off-road vehicle use rather than 14,796 acres.

Impacts to Wilderness Values

None of the wilderness values on 24,922 acres would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated for the next five years.

In the long-term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. This alternative's management of 12,614 acres as roadless would help to retain wilderness values on a portion of the area. This acreage would be open to mineral exploration but operating plans and special stipulations regarding road construction, siting and rehabilitation would be written to minimize the impacts of mineral activity. No mineral activity is anticipated on these 12,614 acres.

Prospecting for phosphate is expected to occur on 1,920 acres, with development of a mine being likely if an economically feasible discovery was made. Known deposits occur just north of the wilderness study area. Two miles of road construction would probably be associated with the phosphate area. The wilderness value of naturalness would be lost on the 1,920 acres. The perception of naturalness would be essentially lost over an additional 200-acre area because the area of phosphate prospecting could be seen.

Renewed mining of gypsum in Clear Creek would impact the perception of naturalness on 300 acres adjacent to the mine. One mile of road construction is anticipated.

For the purpose of this analysis, it is assumed that two discoveries and lode claims would be made between Dry Canyon and Horse Thief Creek. Based on similar developments in the area, construction of one mile of road and 50 acres of surface disturbance is expected.

The wilderness value of naturalness would be adversely impacted on a total of 2,470 acres between Dry Canyon and Horse Thief Creek.

In addition to naturalness, activities associated with mineral development would adversely impact the wilderness value of solitude. Sights and sounds from traffic and construction related to the above development would lower the quality of solitude on 2,470 acres.

Sights and sounds from recreational off-road vehicle (ORV) use would have an adverse impact on solitude. However, this impact is expected to be negligible compared to mining activities since off-road vehicle use is estimated to be less than 25 visitor days annually (estimate by BLM personnel), and is expected to remain below 50 visitor days annually for the next 10 years.

Conclusion: Wilderness values would be adversely affected on 10 percent (2,470 acres) of the WSA. Wilderness values on 90 percent (22,452 acres) would be subject to loss but no adverse activities are anticipated.

Impacts to Cultural Resources

Impacts and conclusions would be identical to those described for Alternative F.

Impacts to Economic Factors

The impacts and conclusions associated with this alternative would be the same as described for Alternative F.

SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

The short-term uses of man's environment are described for each alternative in Chapter 2. The relationship of these short-term uses to long-term productivity for various resources is discussed in this Chapter. The following is a summary of these discussions.

Energy and Minerals Activities

Projected demand would be met under all alternatives. There is little probability of any short-term mineral use of the mineral resources causing problems in meeting foreseeable long-term demand.

Timber Yield and Availability

The set-asides and multiple-use restrictions under Alternatives F and G would reduce the long-term productivity of the forest resource by removing commercial forest acreage from the timber production base and limiting the opportunity to harvest restricted stands at the proper rotation intervals. However, timber harvesting and forest development activities (thinning, tree planting, and site preparation) would offset this loss and significantly increase long-term productivity. Increased tree growth would result from the reforestation of nonstocked stands, thinning of overstocked stands, and harvest of mature trees on scheduled rotations.

Livestock Grazing

Under Alternatives F and G, the short-term 19 percent reduction relative to 5-year average use would benefit range vegetation in the long term. This, in turn, would allow a return to current livestock use levels.

Range Vegetation

Under Alternative F and G, the restriction on short-term use by livestock (19 percent reduction relative to 5-year average use) would result in an increase in long-term productivity of the range vegetation. Good ecological condition range would increase from 61 to 66 percent and excellent condition from 1 to 3 percent.

Crucial Wildlife Habitats

Proposed short-term uses under Alternatives F and G would generally improve long-term wildlife habitat productivity. Restrictions on mineral and other development would protect crucial wildlife habitat values.

Water Quality, Watershed, and Soils

Timber harvesting activities, especially road building, would outweigh benefits resulting from livestock management, resulting in a slight, long-term decline in overall soil and water quality and watershed condition. Exclusion of livestock from 15.5 miles of stream riparian areas would improve long-term water quality in localized areas.

Riparian Habitat

A total of 500 acres of stream riparian habitat would be fenced to exclude livestock, and other riparian areas would be managed to protect habitat values. These actions would slightly increase the long-term productivity of riparian habitat in terms of species composition, wildlife habitat, and water quality and quantity.

Fisheries Habitat

Restrictions on livestock grazing use on 5 3/4 miles of stream fisheries habitat would result in a slight overall improvement to fisheries habitat over the long term.

Recreation Uses and Visual Quality

Under Alternative F, short-term development of timber, minerals, and other resources would not be allowed to affect long-term recreation opportunities. Long-term productivity would be enhanced by developing recreation sites and giving special attention to the three special recreation management areas.

Wilderness Values

Short-term use of the Eighteenmile Wilderness Study Area (WSA) would not cause any significant impacts. Few activities of any kind are anticipated, and the WSA would be managed to retain wilderness values until Congress chose designation or nondesignation.

Short-Term Use Versus Long-Term Productivity

Long-term productivity would depend on the final wilderness decision. A no wilderness decision would allow full productivity for minerals but would significantly reduce the WSA's ability to provide wilderness and primitive recreational opportunities. A wilderness decision would maximize production of wilderness and primitive experience but would forego any mineral development. The proposed action would allow mineral production within the lands rated most favorable for mineral potential, while retaining wilderness and primitive opportunities on a substantial portion of the WSA.

Cultural Resources

Any surface-disturbing activity that resulted in a loss of a site would decrease the long-term productivity of the cultural resource data base in terms of knowledge to be gained. However, Alternative F should decrease long-term impacts and would protect five significant cultural sites.

Economic Factors

The short-term use of public land for agricultural development would prevent its long-term use as a source of grazing for area livestock operators. Croplands would contribute greater income and employment to the local economy. However, the federal government would not receive grazing or any other revenues if these lands were transferred out of federal ownership.

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES

The implementation of any of the alternatives would limit some potential future uses of the land and resources. Irreversible or irretrievable commitments of resources are those that would occur when future options were foreclosed.

Transfer of lands out of federal ownership would result in a loss of administrative control for all resource values except minerals and valid existing rights-of-way.

Implementation of the Preferred Alternative (Alternative F) or Alternative G would result in the following irreversible or irretrievable commitments of resources.

Energy and Mineral Availability

The extraction of any mineral product would generally be an irretrievable commitment of the recovered mineral product. Energy resources consumed during exploration, development, and production would also be irretrievable.

Timber Yield and Availability

Designation of the Eighteenmile WSA as wilderness would result in the irreversible and irretrievable loss of harvestable timber yield from suitable commercial forest land in that area.

Livestock Grazing

Grazing preference would be lost on lands transferred from federal ownership.

Range Vegetation

Completion of nonstructural range improvements (vegetation manipulations such as chaining and prescribed burning) would represent an irretrievable and irreversible commitment of land and resources for the life of the projects.

Irreversible or Irretrievable Commitment of Resources

Crucial Wildlife Habitats

Wildlife habitat under BLM's jurisdiction would be irreversibly and irretrievably lost on lands transferred out of federal ownership through sale, exchange, or issuance of mineral patents. Mining and mineral activity could involve an irretrievable commitment of wildlife habitat, particularly where reclamation was inadequate or failed. Displacement of disturbance-intolerant species could result in an irreversible, irretrievable impact. Vegetation projects such as prescribed burning would involve an irretrievable or irreversible commitment of resources during the life of the projects.

Water Quality, Watershed, and Soils

Loss of soil because of conversion from rangeland to cropland is regarded as irreversible. Erosion losses, especially on the fair and poor ecological condition rangeland, would also be irretrievable.

Fisheries Habitat

The loss of fisheries habitat through land disposal or other actions that would permanently alter the character of the aquatic habitat would represent an irretrievable and irreversible land use commitment.

Recreation Uses and Visual Quality

Lands that shifted from the semi-primitive nonmotorized to the semi-primitive motorized class would likely never return to the original class. Structural improvements such as campgrounds or boat ramps would represent irreversible and irretrievable commitments of land and resources.

Wilderness Values

Development of 2,470 acres for minerals within Alternative F's nonwilderness area would be an irretrievable and irreversible commitment of the wilderness values on these lands. Withdrawal of minerals within the area recommended for wilderness would not be irreversible, but it would require Congressional action; it is not known if this has ever occurred.

Cultural Resources

Once lost, cultural resources data cannot be retrieved. The loss of any site would be considered irreversible and irretrievable.

Economic Factors

Income, once lost, is irretrievable. The trend of reduced income, however, can be reversed and income restored to its former levels.

CHAPTER 5

CONSULTATION AND COORDINATION

PUBLIC PARTICIPATION

Consultation and coordination with agencies, organizations, and individuals occurred throughout the planning process. Numerous opportunities were provided for the public to participate. Techniques ranged from informal one-on-one meetings to more formal meetings with the public and other agencies. The following list summarizes public participation activities for the Lemhi Draft Environmental Impact Statement/Resource Management Plan (RMP/EIS).

Date(s)	Activity
Field Season 1981, 1982, 1983	Sent an open invitation to all permittees to see the soil survey and range inventory methods that would be conducted on their allotment. In 1981 a tour was conducted in the Gilmore Summit area; in 1982, in the Warm Springs area; and in 1983, in the Stormy Peak area. Most permittees were contacted prior to conducting the range inventory on their allotment.
March - May 1983	- Met with the U.S. Forest Service and eight grazing associations on planning issues and the nine steps of the RMP process. A BLM wildlife temporary employee interviewed 40 landowners on wildlife issues in the Lemhi RMP area.
March 9, 1983	- Met with the Salmon District Grazing Advisory Board to discuss the Lemhi RMP and explain the nine steps involved in an RMP.
July 6, 1983	- Sent a newsletter to 350 people describing the planning process and asking for issues. Twelve people responded with issues.
July 7, 1983	- Published a Notice of Intent to Prepare Resource Management Plan in the Federal Register.
July 21, 1983	- Published a news article in the Salmon Recorder-Herald concerning issues.
July 31, 1983	- Published a news article in the Idaho Falls Post Register concerning issues.
August 4, 1983	- Met with the Salmon District Advisory Council to get their input on issues.

November 24, 1983 - Sent a newsletter to 350 people asking for comments concerning the eight issues identified. Forty-five people responded (26 with comments and 19 asking to remain on the mailing list).

December 8, 1983 - Published a news article in the Salmon Recorder-Herald on issues and planning criteria.

March 28, 1984 - Met with the Salmon District Grazing Advisory Board. Issues, planning criteria, inventory, the management situation analysis, alternatives, and the RMP schedule were discussed.

November 1984 - Met with the Lemhi Cattle and Horse Growers Association. The planning process, issues, alternatives, and timetable for the Lemhi RMP were discussed.

February 7, 1985 - Met with Lemhi County Agent and SCS Area Conservationist. The existing situation concerning range, average stocking rates, and initial stocking rates was discussed.

March 1985 - Notified range users by certified mail of M-I-C (Maintain-Improve-Custodial) category on their allotments.

March 22, 1985 - Sent a newsletter to 285 people concerning alternatives. Twenty-seven people responded (13 with comments and 14 asking to remain on the mailing list).

March 26, 1985 - Met with the Salmon District Advisory Council on RMP alternatives.

March 29, 1985 - Met with the Salmon District Grazing Advisory Board on RMP alternatives.

April 2, 1985 - Published a news article in the Idaho Falls Post Register about the alternatives.

April 4, 1985 - Met with the Salmon Federal Agricultural Committee to discuss alternatives.

April 1985 - Met with nine Grazing Associations. Allotment categorization, RMP alternatives, and the RMP schedule were discussed.

April 4, 1985 - Published a news article in the Salmon Recorder-Herald on the alternatives.

April 30, 1985 - Met with representatives of the Salmon, Targhee, and Beaverhead national forests to coordinate wilderness planning for the Eighteenmile WSA.

May 2, 1985 - Published a second Notice of Intent to Prepare Resource Management Plan/EIS in the Federal Register. This notice superseded the notice of July 7, 1983.

DISTRIBUTION OF DRAFT RMP/EIS

The following is a list of agencies, organizations, and individuals to whom the Draft Lemhi RMP/EIS has been sent.

Elected Federal Officials

Senator James McClure
Senator Steve Symms
Representative Richard Stallings
Representative Larry Craig

Elected State Officials

Governor John Evans
State Senators and Representatives

Advisory Councils

Salmon District Advisory Council
Salmon District Grazing Advisory Board

Organizations

Committee for Idaho High Desert
Idaho Archaeological Society
Idaho Cattlemen's association
Idaho Conservation League
Idaho Natural Heritage Program
Idaho Wildlife Federation
Lemhi Cattle and Horse Growers Association
Minerals Exploration Coalition
Natural Resources Defense Council
Rocky Mountain Oil and Gas Association
Salmon River Trail Ride Association
Sierra Club
Wilderness Society

Federal Agencies

Agricultural Stabilization and Conservation Service
Bureau of Indian Affairs
Bureau of Mines
Bureau of Reclamation
Department of Agriculture
Department of the Air Force

Department of Justice
Department of Transportation
Environmental Protection Agency
Federal Aviation Administration
Federal Energy Regulatory Commission
Fish and Wildlife Service
Forest Service
Geological Survey
National Park Service
Soil Conservation Service

State of Idaho Agencies

Governor John Evans
Office of the Governor, Paul Cunningham, Special Assistant

Department of Health and Welfare
  Division of Environment (Administrator)
  Division of Environment (Air Quality)
  Division of Environment (Hazardous Materials)
  Division of Environment (Water Quality)
  Division of Environment (Gordon Hopson)

Department of Fish and Game
  Regional Supervisor Salmon, Idaho
  Regional Supervisor Idaho Falls, Idaho
  Jerry Conley, Director, Boise, Idaho

Division of Financial Management

Department of Lands
  Director, Boise, Idaho
  Bureau of Lands
  Bureau of Minerals
  Bureau of Navigable waters
  Bureau of Range Management
  Eastern Idaho Area

Department of Parks and Recreation
  Statehouse, Boise, Idaho
  Dale Christiansen, Director

Department of Transportation
  Division of Highways, Rigby, Idaho (Tom Baker)
  Division of Highways, Rigby, Idaho (J.R. Dick)
  Charles Rountree, Boise, Idaho

Department of Water Resources
  Ken Dunn, Director, Boise, Idaho
  Eastern Regional Office

Extension Range Specialist, Twin Falls, Idaho

Historical Society State Archaeologist
Historic Preservation Officer

Idaho Air National Guard
Idaho State University
Natural Resources Division
State Library, Boise, Idaho
University of Idaho

Local Governments

City of Salmon
Lemhi County Agent
Lemhi County Commissioners
Lemhi County Planning and Zoning Commission
Salmon Public Library
Salmon Valley Chamber of Commerce
Shoshone-Bannock Tribe

In addition to the above, approximately 200 copies have been sent to other individuals.

LIST OF PREPARERS

The Lemhi Draft RMP/EIS was prepared by an interdisciplinary team with expertise in land transactions, minerals and energy, forest management, range management, water quality, soils, wildlife habitat management, fisheries, outdoor recreation, cultural resources, fire management, and economics. All but one team member was from the Salmon District.

Name (Position)/ Responsibility	Education	Experience
Loren Anderson (Wildlife Biologist)/Wildlife	B.S., Wildlife Biology Research option, Colorado State Univ.	3 yrs. as Range Tech., BLM; 14 1/2 yrs. as Wildlife Biologist, BLM
Nancy Anderson (Archaeologist)/Cultural Resources	B.A., Anthropology, Univ. of South Fla., Tampa	8 1/2 yrs. as archaeologist, BLM
George Babits (Geologist)/Energy and Minerals	B.S., Geology, Washington State Univ.	1/2 yr. as Geologic Field Assistant, Placer Ltd.; 3 1/2 yrs. as Field Geologist, Soil Conservation Service; 3 yrs. as Project Geologist, Bureau of Reclamation; 4 1/2 yrs. as Geologist, BLM
James Behm (Soil Scientist)/Soils	B.S., Soils, Univ. of Minnesota	7 yrs. as Soil Scientist, BLM
Rob Carlin (Forester)/ Forestry	B.S., Forestry, Univ. of Massachusetts, Amherst	4 yrs. as Seasonal Range Tech. (Fire); 1 yr. as Forestry Tech. USFS NE Forest Exp. Sta.; 2 yrs. as Forestry Tech., BLM; 4 yrs. as Forester, BLM
Jerry Christian (Fire Management Spec.)/Fire Management	60 College Credits in Psychology, Idaho State University	2 yrs. as Engineering Tech., USFS; 13 yrs. as Fire Technician, USFS; 12 yrs. as Fire Management Officer, BLM
Bruce Easton (Range Conservationist)/Livestock and Range Management	B.S., Wildlife Biology, special emphasis Range Management, Humboldt	2 yrs. as Range Tech.; 8 yrs. as Range Conservationist, BLM State

Name (Position)/ Responsibility	Education	Experience
Stanley Frazier (Agri cultural Economist)/ Econimics Idaho State Office	B.S., Agricultural Economics, Oregon State Univ.	9 yrs. as Economist, BLM
Grant Harbour (District Planning Coordinator)/ Technical Coordinator	B.S., Forest/Range Management, Colorado State University	5 yrs. as Range Con., 12 yrs. as Area Manager, 7 yrs. as Chief of Operations, 2 yrs. as Planning and Environmental Coordinator, all with BLM
Charles Keller (Fisheries Biologist)/Fisheries	B.S., Fisheries Biology, Humboldt State College, CA	8 yrs. as Fisheries Biologist, BLM
Sue Kozacek (Range Conservationist)/Livestock and Range Management	B.S., Biology Ft. Lewis College, Durango Colorado; M.S., Wildlife Biology, Colorado State Univ.; Post Graduate work, Range Management, Utah State University	6 yrs. as Range, Wildlife, and Forestry seasonal for BLM, NPS, and USFS; 1 yr. as Wildlife Biologist, USFS; 4 yrs. as Range Conservationist, BLM
Lyle Lewis (District Hydrologist)/Hydrology and Watershed	B.S., Rangeland Resources, Oregon State University	4 yrs. as Range Con., BLM; 2 yrs. as Watershed specialist and Hydrologist, BLM
Dave McGowan (Range Conservationist)/Livestock and Range Management	B.S., Rangeland Resources, Oregon State University	1 yr. as Range Tech. and Forestry Tech. for BLM and Pacific North West Range Experiment Station; 7 1/2 yrs. as Range Con., BLM
Jack Mills (Planner)/ Quality Control and State Office Coordinator Idaho State Office	B.A., Political Science, Dartmouth College; MUP, Urban Planning, New York Univ.	14 yrs. as Planning and Environmental Coordinator, 7 yrs. with BLM and 7 yrs. with state government in NY and VA
Harley Metz (Supervisory Range Con.)/Team Leader	B.S., M.S., Range Ecology, Colorado State University	1 yr. as Research Tech. USFS; 5 yrs. as Natural Resource Specialist, BLM; 6 yrs. as Range Conservationist, BLM

Name (Position)/ Responsibility	Education	Experience
Louise (Laurie) Perotto (Editorial Clerk)/Typist	High School	2 yrs. as Editorial Clerk, Salmon BLM District Office
Stephanie Snook (Realty Specialist)/Lands	Lands and Realty School, BLM Training Center, Phoenix, AZ	3 yrs. as Records Mgmt. Specialist, 9 months as Budget Analyst, 6 yrs. as Realty Specialist, all with BLM
Jerry Wilfong/Area Manager	B.S., Forestry/Fisheries, University of Idaho	2 yrs. as Forestry tech., 2 yrs. as Natural Resource Specialist, 5 yrs. as Outdoor Recreation Planner, 3 yrs. as Planning and Environmental Coordinator, 2 yrs. as Area Manager, all with BLM
Bob Woerner (Supervisory Editor)/Editor Denver Service Center	B.A., English, Grand Valley State College, Michigan	1 yr. as Supervisory Editor, BLM; 1 yr. as RMP team leader and district environmental coordinator, BLM; 4 yrs. as writer and editor, BLM
Dave Wolf (Recreation Planner)/Recreation and Wilderness	B.S., Wildlife Biology, Colorado State Univ.; B.S., Outdoor Recreation, Colorado State University	1 yr. as Planning Tech., Fort Collins, Colorado, 1/2 yr. as Claims representative, Social Security Administration; 8 yrs. as Outdoor Recreation Planner, BLM

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GLOSSARY

Active Grazing Preference (AP): The number of animal unit months (AUMs) of grazing that eligible livestock operators may annually license on public lands. Sometimes referred to as "grazing preference."

Activity Occasion: Participation by one person in one activity for all or part of one day.

Actual Use (AU): The livestock use (in AUMs) made during one grazing season by livestock on the forage of an area. Actual use may differ from active grazing preference due to yearly variations in a live- stock operation or forage availability.

Allotment: An area of public land designated and managed for livestock grazing. It consists of one or more pastures and may include private, state, and /or other land ownerships.

Allotment Management Plan (AMP): A documented program which applies to livestock operations on the public lands which is prepared in consultation, cooperation and coordination with the permittee(s) and others involved. It prescribes the manner in and extent to which livestock operations will be conducted in order to meet the multiple use and sustained yield objectives as determined in the resource management plan.

Allowable Cut: The amount of timber which can be harvested on an annual or decadal basis consistent with the principle of sustained yield.

Animal Unit Month (AUM): A standardized unit of measurement of the amount of forage (800 lbs. dry weight) necessary for the complete subsistence of one animal unit (one cow or one horse or five sheep, all over six months old) for one month.

Apparent Trend: See Trend

Available Commercial Forest Land: Suitable commercial forest land remaining after the multiple use considerations of the RMP have been applied. These lands constitute the timber production base and are available for intensive forest management.

Average Actual Grazing Use: The arithmetic mean (average) of authorized (or licensed) grazing in AUMs over a particular time period.

Bailey-Kuchler System: A classification system that divides the United States into ecosystems based on climate, vegetation, soils, and land form.

Bentonite Badlands: Nearly level barren, fragile land composed mainly of bentonite clay. These badlands generally occur on terrace escarpments and on low areas where intermittent streams have cut into the soft bentonite clay which makes up the underlying material of the terrace.

Brush Control: Reduction of the density or amount of shrubs in an area by burning, spraying, plowing, chaining, discing, or similar means.

Bu-Bushel: A unit of dry measure.

Bureau Planning System: A process used in the BLM to establish land use allocations, constraints and objectives for various categories of public land use.

Capital Value: The value at which assets (grazing privileges) can be sold Market value.

Carey Act: A series of acts popularly known as the "Carey Act" which enables the government to grant lands to eligible states which may in turn make grants to entrymen who irrigate and reclaim said lands (see 43 U.S.C. 641).

Categorical Review Process: The process of determining whether a proposed action is a categorical exclusion. A categorical exclusion is a category of actions which do not individually or cummulatively have a significant effect on the human environment and for which neither an environmental assessment nor an environment impact statement is required.

Classification and Multiple Use Act: The Act of September 19, 1964 (78 Stat. 986; 43 U.S.C. 1411-18) closed a substantial amount of public land to disposal under the agricultural land laws (Homestead Entry, Public Sale, Desert Land Entry and others) and a lesser amount of land to the general mining laws.

Clear Cut: An area on which the entire timber stand is to be cut unless single trees, logs or other reserved trees are specifically designated to remain.

Closed ORV Designation: Motorized vehicles are prohibited.

Commerical Forest Land: All forest land that is capable of yielding at least 20 cubic feet of wood per acre per year of commercial coniferous tree species.

Common Varities (of minerals): Includes deposits which, although they have value for use in trade, manufacture, the sciences, or in the mechanical or ornamental arts, do not possess a distinct, special economic value for such use over and above the normal uses of the general run of such deposits. (43 CFR 3711.1(b))

Community Pit: A site from which nonexclusive disposals of mineral materials can be made.

Condition:

Ecological Condition: The present state of the vegetation on a range site in relation to the climax (natural potential) plant community for that site.

Seeded Condition: The amount and productivity of seeded species measured in terms of maximizing production of forage for livestock. Considers the amount of reinvading shrub species in the treatment area.

Cone Serotiny: A wax-like coating on the cones of some tree species which prevents the dispersal of seed until the cones are heated to high temperatures, as in a fire. this provides a large seed source following a fire.

Coordinated Resource Management Plan: A plan developed to formulate a resource management program that integrates and makes provision for all resource values and uses within the selected geographical area. The plan is coordinated with the Soil Conservation Service, U.S. Forest Service, Idaho Department of Fish and Game, Idaho Department of Land, BLM, and livestock permittees.

Council on Environmental Quality (CEQ): Established in the Executive Office of the President by NEPA. Among other items, CEQ establishes regulations to tell Federal agencies what they must do to comply with NEPA.

Cover: Vegetation used by wildlife for protection from predators, or to ameliorate conditions of weather, or in which to reproduce (Thomas, 1979).

Cross Ditched: Small ditches or humps in the roadway running perpendicular to the road course allowing water to run off the road.

Crucial Habitat: Habitat which is absolutely basic to maintaining viable populations of fish, wildlife or plants during certain seasons of the year or specific reproduction periods; a portion of the habitats of sensitive species that if destroyed or adversely modified could result in their species being listed by a state agency or legislature as threatened or endangered.

Cultural Resources: Those fragile and nonrenewable remains of human activity, occupation, or endeavor, reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features, that were of importance in human events. These resources consist of (1) physical remains, (2) areas where significant human events occurred -- even though evidence of the event no longer remains, and (3) the environment immediately surrounding the actual resource. Cultural resources, including both prehistoric and historic remains, represent a part of the continuum of events from the earliest evidences of man to the present day.

CWT: Hundred weight, a unit of measure equal to 100 pounds.

Day (Recreation): Any part of a day spent participating in a given activity.

Desert Land Entry (DLE): An entry of irrigable, arid, agricultural, public land under the Act of March 3, 1877 (19 Stat. 377; 43 U.S.C. 327, et esq.) which the entryman must reclaim, irrigate and cultivate. A state resident may file and receive patent to a maximum of 320 acres.

Directional Drilling: A method of fluid mineral exploration or extraction whereby the drill hole is purposely drilled off vertical. This method is generally used as a means of exploring or developing known oil, gas, or geothermal resources when they exist beneath lands protected with a no surface occupancy restriction.

Disaster Fire: Usually a large fire that has destroyed or has the potential to destroy a large volume of natural resources or man-made resources, life, limb or animals.

Ecological Condition: See Condition

Ecological Site: A distinctive kind of range land which, in the absence of abnormal disturbance and physical site deterioration, has the potential to support a native plant community typified by an association of species different from that of other sites. This differentiation is based upon significant differences in kind or proportion of species, or total productivity.

Ecosystem: An ecological unit consisting of both living and nonliving components which interact to produce a natural, stable system.

Ecosystem Management: The integration of different land management goals to ensure that the integrity of the ecosystem will be maintained. Ecosystem management is directed toward habitat management rather than species management, the concept being that species will be maintained naturally if a proper mosaic of habitats exists.

Energy Minerals: Any mineral which can be used to produce energy. Refers to oil, gas, geothermal, coal, and uranium resource.

Environmental Assessment (EA): A concise public document prepared to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. It includes a brief discussion of the need for the proposal, alternatives considered, environmental impact of the proposed action and alternatives considered, environmental impact of the proposed action and alternatives, and a list of agencies and persons consulted.

Environmental Impact Statement (EIS): A written analysis of the impacts on the environment of a proposed project or action.

Escape Cover: Usually vegetation dense enough to hide an animal; used by animals to escape from potential enemies (Thomas, 1979).

Escarpment: A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and produced by erosion or faulting. The term is more often applied to cliffs produced by differential erosion and it is commonly synonymously with "scarp".

Exchange-of-use (EOU): An agreement between the BLM and an applicant having ownership or control of non-federal land within a grazing allotment. The applicant is allowed to license a designated number of AUMs without payment, provided that during the length of the agreement the BLM has control and management of the non-federal land for grazing purposes. Non-federal lands within an allotment and not covered by an EOU agreement are also managed in conjunction with the federal lands of the allotment, but no AUM credits are given to the land owner/lessee.

Fan Terrace: A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces. An abandoned former fan surface.

Federal Land Policy and Management Act (FLPMA): Public Law 94-579 signed by the President on October 21, 1976. Established public land policy for management of lands administered by the Bureau of Land Management. FLPMA specifies several key directions for the Bureau, notably that: management be on the basis of multiple use and sustained yield; land use plans be prepared to guide management actions; public lands be managed for the protection, development and enhancement of resources; public lands be retained in federal ownership; and public participation be utilized in reaching management decisions.

Federal Mineral Estate: Mineral reserves belonging to the Federal government. Because of changes in land disposal laws, the surface of some areas were patented out of federal ownership while the mineral portion of the land was retained by the government.

Fire Line Explosives: A charge of dynamite used to construct a line down to mineral soil to help stop fire spread.

Five-Year Average Grazing Use: The arithmetic mean (average) of the actual grazing use in AUMs over the last 5 years (1980-1984)

Foothills: A steeply sloping upland with hill--relief (up to 1000 ft.) that fringes a mountain range or high plateau escarpment.

Forage: All browse and herbaceous foods that are available to herbivores.

Fluid Mineral: Liquid or gaseous minerals. Generally used to refer to oil, gas, and geothermal resources.

Geology, Energy and Minerals (GEM) Program: BLM-initiated program intended to provide minerals information to be utilized in the wilderness studies.

Geothermal Resources: An energy resource which uses the heat of the earth in any fashion. This could include space heating, power generation, food drying, etc.

Grazing Preference: The total number of animal unit months of livestock on public lands apportioned and attached to base property owned or controlled by a permittee. Some of the total grazing preference may have been suspended in past administrative actions. That portion of the grazing preference that is not suspended is the active grazing preference.

Grazing System: Scheduled grazing use and nonuse of an allotment to reach identified goals or objectives by improving the quality and quantity of vegetation.

Habitat Management Plan (HMP): A written and approved activity plan for a geographical area of public lands which identifies wildlife habitat management activities to be implemented in achieving specific objectives of planning decisions.

Harassment: Any activity which precipitates excitement in an animal, causes it to prepare itself, physiologically, for flight, panic, exertion, and consequent damage to or death of the animal (Geist, 1975).

Harvestable Timber Yield: Volume of timber attainable in a fully stocked natural stand.

Holistic: Emphasizing the importance of the whole and the interdependence of its parts (Morris, 1976).

IMP: See Wilderness Interim Management Policy

Impact: The effect, influence, alteration, or imprint caused by an action.

Impair: To diminish in value or excellence.

Industry (Sector): A segment of the economy that is made up of like business (i.e. the livestock industry, the retail trade industry). The terms industry and sector are used interchangeably in this document.

Inholdings: State or privately owned lands inside a wilderness study area.

Input-Output Analysis: Input-output models are basically a table showing the interindustry transactions that lie behind changes in final demand. It is a descriptive framework for showing the relationship between inputs and outputs. It is an analytical tool for measuring the impact of independent disturbances on an economy's output and income.

Isolated Tracts/Parcels: Any relatively small parcel of public land isolated from large blocks of public land.

Land Treatment: See Vegetative Manipulation

Leasable Minerals: Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. They include coal, phosphate, asphalt, sulphur, potassium and sodium minerals, oil, and gas. Geothermal resources are also leasable under the Geothermal Steam Act of 1970.

Limited ORV Designation: Motorized vehicles are permitted, subject to specified conditions such as seasonal limitations, speed limits and designated routes of travel as developed during subsequent activity planning.

Limited Suppression: Suppression actions that are less than full suppression.

Livestock Grazing Operations: Those operations under permit where the primary purpose is the grazing of livestock for the production of food and fiber.

Locatable Minerals: Minerals that may be acquired under the Mining Law of 1872, as amended. (Maley)

Lop and Scatter: A slash disposal method in which the branches and tops of harvested trees are cut and scattered across the forest floor to prevent large accumulations and to aid decomposition.

Management Framework Plan (MFP): A land use plan that establishes land use allocations, multiple use guidelines and management objectives for a given planning area. The MFP planning system was used by BLM until about 1980.

MBF: Thousand Board Feet

Metropolitan Statistical Area (MSA): A county that contains at least one city of 50,000 inhabitants or more plus as many adjacent counties as are metropolitan in character and are socially integrated with that central city or cities.

Mineral Entry: Claiming public lands (under administration of BLM) under the Mining Law of 1872 for the purpose of exploiting minerals. May also refer to mineral exploration and development under the mineral leasing laws and the 1947 Material Sale Act.

Mineral in Character: Land with conditions indicating that mineable mineral deposits may be present.

Mineral Location: Perfecting the right to a mining claim by discovery of a valuable mineral, monumenting the corners, completing discovery work, posting a notice of location, and recording the claim. (Maley)

Mineral Material Trespass: The unauthorized severence or removal of mineral material.

Mineral Materials: See Saleable Minerals.

Mineral Material Site: Lands designated for the disposal of mineral materials for public highways under the Federal Highway Act (23 U.S.C. 317). These lands are closed to entry under the mining laws.

Mineral Potential: The possibility or probability for the discovery of economic mineral resources.

Moderate Mineral Potential: The area has some mineral potential as demonstrated by either the location of mining claims, reported mineral occurrence, or both.

Low Mineral Potential: The area has no reported mineral occurrences or mining claims.

Mitigating Measures: Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice or proposed action.

Monitoring: In reference to an RMP, monitoring is a process of examining the results of implementation of the RMP to determine if the plan objectives are being accomplished.

In reference to rangeland monitoring, monitoring is a process of examining the results of rangeland management, including trend, utilization and condition to determine if management is satisfactory or if a proposed change in management would be acceptable.

Motor Vehicle: Any self-propelled conveyance.

Multiple-Species Crucial Area: Zone of overlap of crucial habitat for three or more species of wildlife. Used to help select proposed acreages of mineral No Surface Occupancy.

Multiple Use: Management of the various surface and subsurface resources so that they are utilized in the combination of ways that will best meet the present and future needs of the public, without permanent impairment of the productivity of the land or the quality of the environment.

Multiple Use Areas: Lands to be retained in public ownership and managed for a variety of uses by the Bureau of Land Management.

Multiplier, Employment: A multiplier is a number, generated by input-output analysis, that measures the total change in employment through all sectors of the economy. For instance, if the multiplier = 2.0 then for every direct employment change, an additional job is gained/lost elsewhere in the economy.

Multiplier, Income: See Multiplier, Employment

National Environmental Policy Act of 1969 (NEPA): Public Law 91-190. Establishes environmental policy for the nation. Among other items, NEPA requires federal agencies to consider environmental values in decision-making processes.

National Historic Trails (Lewis and Clark): Extended trails which follow as closely as possible and practical the original trails or routes of travel of national historic significance. Their purpose is the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. (The National Trail System Act, as amended.)

National Register of Historic Places (National Register): A listing of architectural, historical, archaeological, and cultural sites of local, state or national significance, established by the Historic Presevation Act of 1966 and maintained by the National Park Service. Sites are nominated to the Register by state or federal agencies. Copies of the National Register are available from the Superintendent of Documents, USGPO, Washington, D.C. 20402.

Naturalness: Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (From Section 2[c], Wilderness Act.)

Niche: The peculiar arrangement of food, cover and water that meets the requirements of a particular species (Hanson, 1962).

Normal Fire Year Plan: The district fire program that sets the limits on personnel, aircraft, ground tankers, and warehouse levels, as well as the funding level for presuppression during the activation period (April 1 through October 31).

Normalized Crop Price: A five-year weighted average of crop prices. Used in economic analysis of farm projects to account for the wide variations in prices that are common to agricultural products.

No Surface Occupancy: A stipulation placed on mineral leases (primarily oil, gas, and geothermal) that allows the minerals beneath the surface to be leased, but prohibits use of the surface.

Noxious Weed: Any plant which has been determined to be injurious to public health, crops, livestock, land, or other property.

Observed Apparent Trend: See Trend

Off-Road-Vehicle (ORV): Any motorized vehicle designed to or capable of cross country travel on or immediately over land, water or snow.

Open ORV Designation: Motorized vehicles may travel anywhere.

Outstanding: Standing out among others of its kind; conspicuous; prominent; or, superior to others of its kind; distinguished; excellent.

Permittees: Livestock operators who have grazing preference on public lands.

Photo Trend: See Trend

Planning Area: The area for which land use plans are prepared and maintained.

Planning Criteria: The factors used to guide development of the land use plan, or revision, to ensure that it is tailored to the issues previously identified and to ensure that unnecessary data collection and analyses are avoided.

Plant Succession: The process by which one plant community replaces another over a period of time, developing toward the climax plant community.

Population Center: A MSA (see definition for Metropolitan Statistical Area) with a population of 100,00 or more.

Potential Natural Vegetation: As defined by Kuchler, the vegetation that would exist today if man were removed from the scene and if the plant succession after his removal was telescoped into a single moment. The time compression eliminates the effects of future climatic fluctuations. This concept is a component of the Bailey-Kuchler system used in the wilderness study process.

Potential Plant Community: The culminating stage in plant succession for a given site where the vegetation consists of a stable community of adapted native plants.

Preference: See Active Grazing Preference

Prescribed Burning: Application of fire to natural fuels under conditions of weather, fuel moisture, soil moisture, and other conditions intended to produce the intensity of heat and rate of spread required to accomplish certain objectives of wildlife management, grazing and/or hazard reduction.

Primitive and Unconfined Recreation: Nonmotorized and nondeveloped types of outdoor recreational activities.

Prospectively Valuable: An evaluation term applied to areas for which there is little actual data on known reserves, but where the geologic environment suggests that there may be potential for the discovery of a particular resource.

Public Land: Vacant, unappropriated, and unreserved lands or lands withdrawn by E.O. 6964 of February 5, 1935, as amended, and not otherwise withdrawn or reserved. Land within grazing districts established under Section 1 of the Act of June 28, 1934 (48 Stat. 1269), as amended, and not otherwise withdrawn or reserved.

Range Condition: See Condition

Range Improvements: Any facility or land treatment that directly affects or supports the use of forage by domestic livestock, such as fences, water lines, stock tanks, reservoirs, spring developments, prescribed burns, and seedings

Range Site: A distinctive kind of rangeland with the ability to produce a characteristic natural plant community. It is capable of supporting a native plant community typified by an association of species that differs from other range sites in the kind or proportion of species or in total production.

RARE II: The second Roadless Area Review and Evaluation used by the U.S. Forest Service to determine wilderness suitability of National Forest Lands.

Recreation Management Area (RMA): Sub-units of Resource Areas that serve as basic land units for recreation management. Each area is identified and managed as a unit based on similar or interdependent recreation values, homogenous or interrelated recreation use, land tenure and use patterns, or administrative efficiency.

Recreation & Public Purposes (R&PP) Act: The Act of June 14, 1926, as amended (43 U.S.C. 869, 869-A). Allows the disposal of public lands to any State, local, Federal or political instrumentality or any non-profit organization for any recreational or public purpose, provided there is no other public land law that is applicable.

Recreation Opportunity: The opportunity to participate in an intrinsically rewarding experience that finds its source in voluntary engagements (mental and/or physical) during nonobligated time.

Recreation Opportunity Spectrum (ROS): A framework for stratifying and defining classes of outdoor recreation opportunity environments along a continuum.

Relict Vegetation Community: An assemblage of plants that is representative of plant communities that have been substantially altered by disturbances such as fire, grazing, cultivation, etc. These plant communities were once much more widespread than at present.

Resource Area: A geographic portion of a BLM District that is the smallest administrative subdivision in the Bureau.

Resource Management Plan (RMP): A land use plan that establishes land use allocations, multiple use guidelines and management objectives for a given planning area. The RMP planning system has been used by BLM since about 1980.

Restricted Commerical Forest Land: Lands in which timber yield is lost due to land use decisions in favor of other resources.

Retardant: A solution, either chemical or just plain water, that can be dropped by an aircraft or by ground tanker application that slows the spread of fire for a limited time.

Roads: Vehicle routes which have been improved and maintained by mechanical means to ensure relatively regular and continuous use.

Saleable Minerals: A group of mineral materials including, but not limited to, petrified wood and common varieties of sand, stone, gravel, pumice, cinders, and clay on public lands. These minerals may be disposed of through a contract of sale or free use permit authorized by the Material Act of 1947 as amended by PL-167 and P1-87-713. Also referred to as mineral materials.

Scarify: Mechanically disturbing the duff layer of the forest floor in order to provide a mineral soil seed bed for the establishment of new trees.

Scoping Process: An early and open public participation process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

SCORP: (Idaho) Statewide Comprehensive Outdoor Recreation Plan.

Sector (Industry): See Industry (Sector)

Select Cut: The removal of selected mature, large, or diseased trees as single, scattered trees or in small groups of trees.

Set-aside: Lands determined suitable for intensive forest management yet withdrawn from the timber production base due to multiple use considerations.

Shelterwood: A silvicultural system aimed at the establishment of a new, essentially even-aged stand from the release, typically in a series of cuttings, of new trees started under the old stand. The essential characteristic is that the new stand is established naturally or artificially before the last of the old one is removed.

Shelterwood System: An even-aged harvesting system which provides for natural regeneration of a new stand of trees by leaving a uniform cover of mature trees from the original stands to provide shade and a seed source.

Site (Archaeological): See Cultural Resources.

Site Preparation: Site disturbance essential for natural or artificial regeneration. Various degrees of disturbance range from mechanical scarification and windrowing to prescribed burning and herbicide applications.

Solitude: The state of being alone or remote from habitations; isolation. A lonely, unfrequented, or secluded place.

Special Recreation Management Area(SRMA): An administratively or Congressionally recognized area that possesses outstanding recreation resources or where recreation use causes significant user conflicts, visitor safety problems or resource damage.

Split Estate: (Syn; Severed Estate) A split estate results when a title is split into two or more parts. Usually the two estates which are severed are the mineral estate, or portions of the mineral estate, and the surface estate. In general, these were originally created when title to the surface passed to private citizens under the various land disposal laws. (Maley)

Stipulation: A condition or agreement made part of any use authorization for the protection or mitigation of damages to other resources.

Stratification: Layering of artifacts within a cultural resource site. If the site is undisturbed, the oldest artifacts are the deepest in the soil strata with the most recent artifacts nearest the surface.

Strutting Ground: A mostly traditional area used by communally displaying male sagegrouse for the purpose of attracting females for breeding (sys. "Lek"). Frequently located in close association with nesting and winter habitat.

Succession: See Plant Succession

Suitable Commercial Forest Land: Commercial forest lands determined to be capable of sustaining long-term timber production.

Suitability: As used in the Wilderness Act and in the Federal Land Policy and Management Act refers to a recommendation by the Secretary of Interior or the Secretary of Agriculture that certain federal lands satisfy the definition of wilderness in the Wilderness Act and have been found appropriate for designation as wilderness on the basis of an analysis of the existing and potential uses of the land.

Superior Right: An existing condition on a particular tract of land which must be honored by any later use of that land. For example, while the designation of a community pit does not withdraw that land from mineral entry, any mineral entry cannot interfere with the community pit in any way.

Supplemental Values: Resources associated with wilderness which contribute to the quality of wilderness areas.

Taylor Grazing Act of 1934: Implemented to stop injury to the public grazing lands by preventing overgrazing and soil deterioration. It authorized the Secretary of Interior to manage the public rangelands.

Thermal Cover: Cover used by animals to ameliorate effects of weather (Thomas, 1979).

Threatened or Endangered Species: Endangered species are any species which are in danger of extinction throughout all or a significant portion of its range. Threatened species are any species likely to become an endangered species within the forseeable future throughout all or a significant portion of its range. A species is classified as either threatened or endangered by the U.S. Fish and Wildlife Service.

Timber Productivity Capability Classification (TPCC): The process of partitioning all forest lands into major classes indicating relative suitability to produce timber on a sustained yield basis.

Tractor Skidding: The removal of logs from the forest to a loading point by the use of crawler or wheeled tractors equipped with a heavy winch.

Trend: The direction of change in ecological condition, usually measured in terms of upward, downward and static.

Apparent Trend: A one time observation of a representative area of a vegetation type which considers plant vigor, seedlings, surface litter, and soil movement, and which compares the vegetative composition of the natural potential (climax community) of the area.

Photo-Trend: A method employing periodic measurements and photographs of vegetation within a selected plot of land to assess range trend on a long-term basis.

Trespass: Any unauthorized use of public land.

Occupancy: Normally, the construction of improvements or placement of materials on public lands.

Agricultural: Normally, the preparation of public land for farming. Includes, but is not limited to, clearing, breaking ground, seeding, cultivating, irrigating, grazing, and harvesting crops.

Utilization: The proportion of current year's forage production that was consumed or destroyed by grazing animals, usually expressed as a percentage.

Validity Examination: A mineral examination conducted to determine whether a mining claimant has a legal right to hold a particular mining claim. In general, a validity examination would include evaluation of the legal requirements of discovery, proper location and filing, and adequate completion of annual assessment work.

Value-At-Risk: A rating system used to prioritize the dispatching of suppression crews in a multiple fire situation. Value-at-risk is established by evaluating each resource separately to determine either beneficial or detrimental effects fire has on that resource. A numerical rating is given each resource, plus being detrimental and minus being beneficial. After each resource has been evaluated individually, the totals are summarized to establish the values.

Vegetation Type: A classification of the present plant community on a site based on the dominant plant species in the community.

Vegetative Manipulation: Actions taken that alter the existing plant communities to achieve the specific management goals in a particular area.

Visitor Use Day (VUD): An administrative measure of a calendar day or portion thereof spent participating in a specific recreation activity by an individual.

Visual Resource Management (VRM): A rating system designed for inventorying and managing visual resources. VRM management classes prescribe the level of acceptable change allowable within a particular landscape.

Way: A vehicle route established and maintained soley by the passage of motor vehicles.

Wetlands: Areas that are inundated by surface or ground water with a frequency to support and, under normal circumstances, does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction (Exec. Order 11990).

Wilderness Characteristics: Identified by Congress in the 1964 Wilderness Act; namely size, naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and supplemental values such as geological, archaeological, historical, ecological, scenic, or other features. A wilderness area must possess at least 5,000 acres or more of contiguous public land; be substantially natural or generally appear to have been affected primarily by the forces of nature with the imprint of man being substatially unnoticeable; and have either outstanding opportunities for solitude or a primitive and unconfined type of recreation. Congress said a wilderness area may have supplemental values, which include ecological, geological or other features of scientific, educational, scenic, or historical value.

Wilderness Inventory: An evaluation of the public lands in the form of a written description and map showing those lands that meet the wilderness criteria as established under Section 603(a) of FLPMA and Section 2(c) of the Wilderness Act, which are referred to as Wilderness Study Areas (WSAs).

Wilderness Management Policy: The BLM's policy that prescribes the general objectives and specific activity guidance applicable to all designated BLM wilderness areas.

Wilderness Recommendation: A recommendation by the Bureau of Land Management, the Secretary of the Interior, or the President, with respect to an area's suitability or nonsuitability for preservation as wilderness.

Wilderness Review: The entire process of wilderness inventory, study and reporting phases of the wilderness program of the Bureau of Land Management.

Wilderness Values: The amenities and benefits connected with areas having large size, naturalness and outstanding opportunities for solitude or primitive recreation.

Withdrawal (Minerals): Any action which suspends the operation of the mining laws on a specified tract of public land. (Maley)

Withdrawals: An action, approved by the Secretary of Interior, which segregates specific lands from the operation of the public land laws and assigns them to a particular management program.

Woodland: Land producing trees that are not typically utilized as sawtimber products and sold in units other than board feet. Woodlands are those forest lands which are not included in the commercial forest land allowable cut base. These lands can include both commercial and noncommercial forest lands.

Woodland Products: Wood products typically sold in units other than board feet such as firewood and Christmas trees.

WSA: Wilderness Study Area. A parcel of public land that, through the BLM's wilderness inventory process, has been found to possess the basic wilderness characteristics of being at least 5,000 acres in size, being primarily natural, and having outstanding opportunities for solitude or primitive and unconfined types of recreation.

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PART III

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APPENDIX A

DETERMINATION OF MINERAL POTENTIAL
OF THE RMP AREA

APPENDIX A

DETERMINATION OF MINERAL POTENTIAL OF THE RMP AREA

In general, there is little data on the locatable mineral potential of most public lands, and the RMP area is no exception. While the many reported occurrences indicate some potential and the large number of mining claims indicate interest, there is no definitive way to classify the mineral potential of the lands.

To delineate possible areas within the RMP area that might have a relatively high potential for locatable minerals, the following methodology was developed:

First, all of the reported mineral occurrences listed in the U.S. Geological Survey "Computerized Resources Information Bank" were plotted on overlays by commodity. These overlays were then "sandwiched" and the relative density of occurrences was used to divide the RMP area into high, medium, and low mineral potential. Low potential areas had no reported occurrences, high potential areas had many occurrences, and medium potential areas fell in between. There was no field verification of any of the reported deposits.

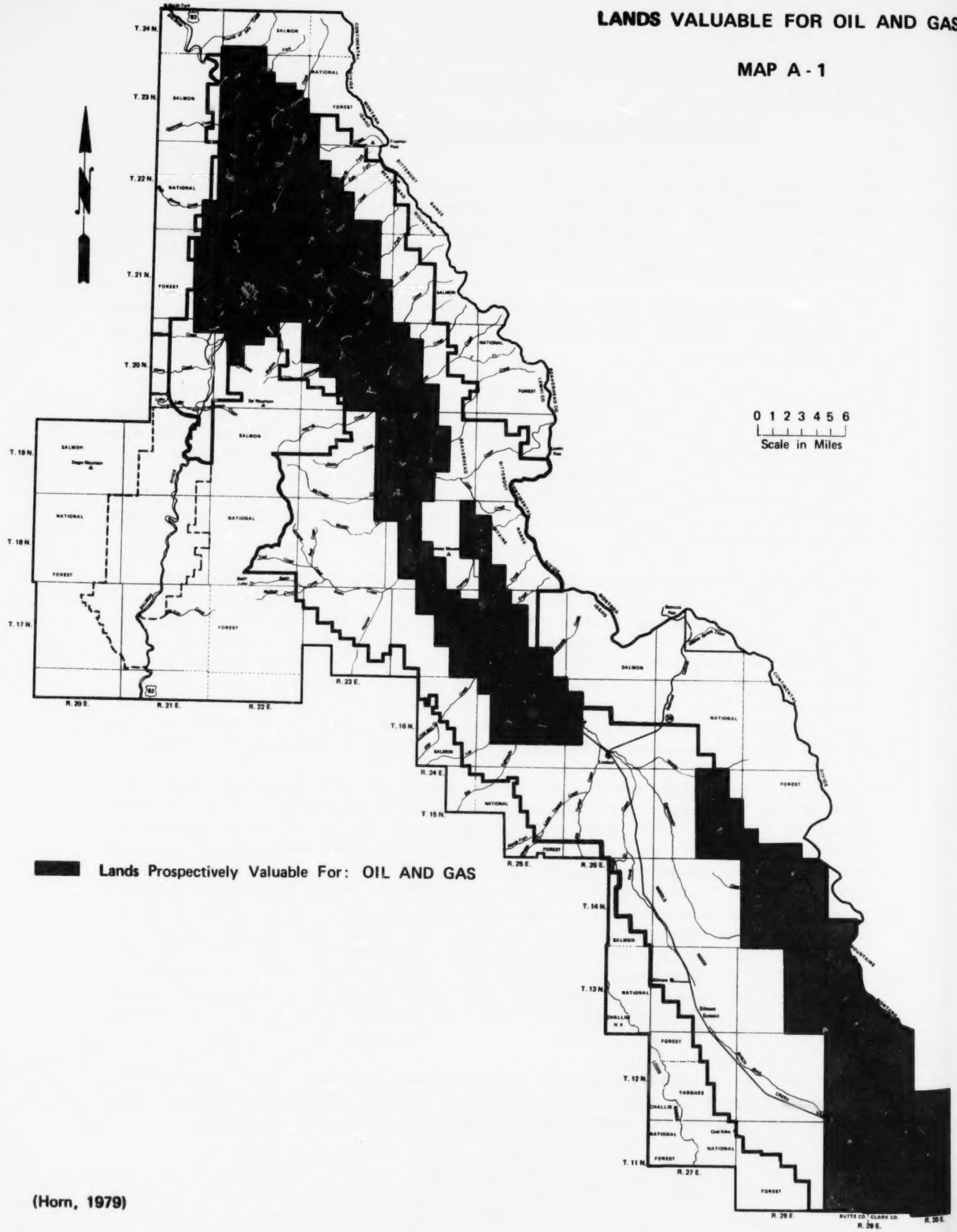
Second, the BLM microfiche mining claim data was used to determine the number of mining claims per section. Because of the different nature of placer and lode mining claims, separate overlays were produced for each and then the two overlays were "sandwiched" to produce a mineral potential overlay based on mining claim density. The following criteria were used: low potential, no mining claims; medium potential, 0 to 14 lode claims, or 0 to 4 placer claims; high potential, 16 or more lode claims, or 5 or more placer claims. The data was obtained in mid-1984 and no attempt was made to ascertain the validity of any of the mining claims.

Finally, a composite overlay was made using the two previous maps, and this formed the basis for evaluating the mineral potential of the various areas within the RMP area relative to each other. Mineral potential ranking for the RMP area was not correlated with any regional or national ranking system, resulting in significant differences, for example, areas that would be rated as "high" on a national level have much greater potential than any area within the RMP area, including the areas rated as high. To take this factor into account, the high and medium categories were combined into a "moderate" potential category for the RMP. The map contained in this appendix reflects this combination. The two categories finally chosen are: (1) moderate (the area contains a reported occurrence or mining claim) and (2) low (no reported occurrence or mining claim).

The potential for the occurrence of other minerals (oil, gas, geothermal, phosphate, coal) is based on a series of mineral potential maps produced by the U.S. Geological Survey in the 1970s for the state of Idaho.

LANDS VALUABLE FOR OIL AND GAS

MAP A - 1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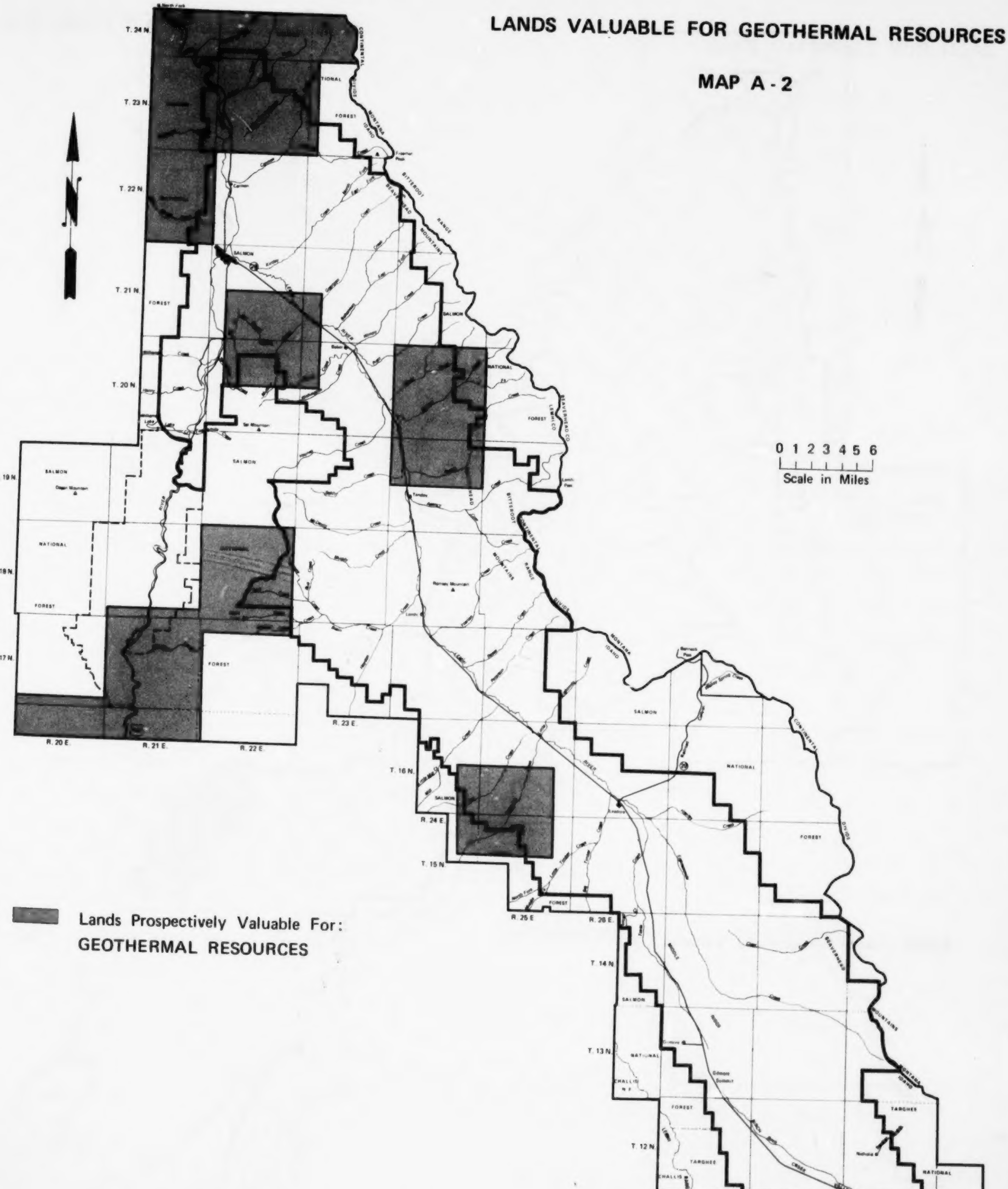
SALMON
NATIONAL
FOREST
CHALLIS
TARGHEE
CONTINENTAL DIVIDE
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
MONTANA
IDAHO
LEMHI CO.
BEAVERHEAD CO.
BUTTE CO.
CLARK CO.
N
0 1 2 3 4 5 6
Scale in Miles

■ Lands Prospectively Valuable For: OIL AND GAS

(Horn, 1979)

LANDS VALUABLE FOR GEOTHERMAL RESOURCES

MAP A - 2



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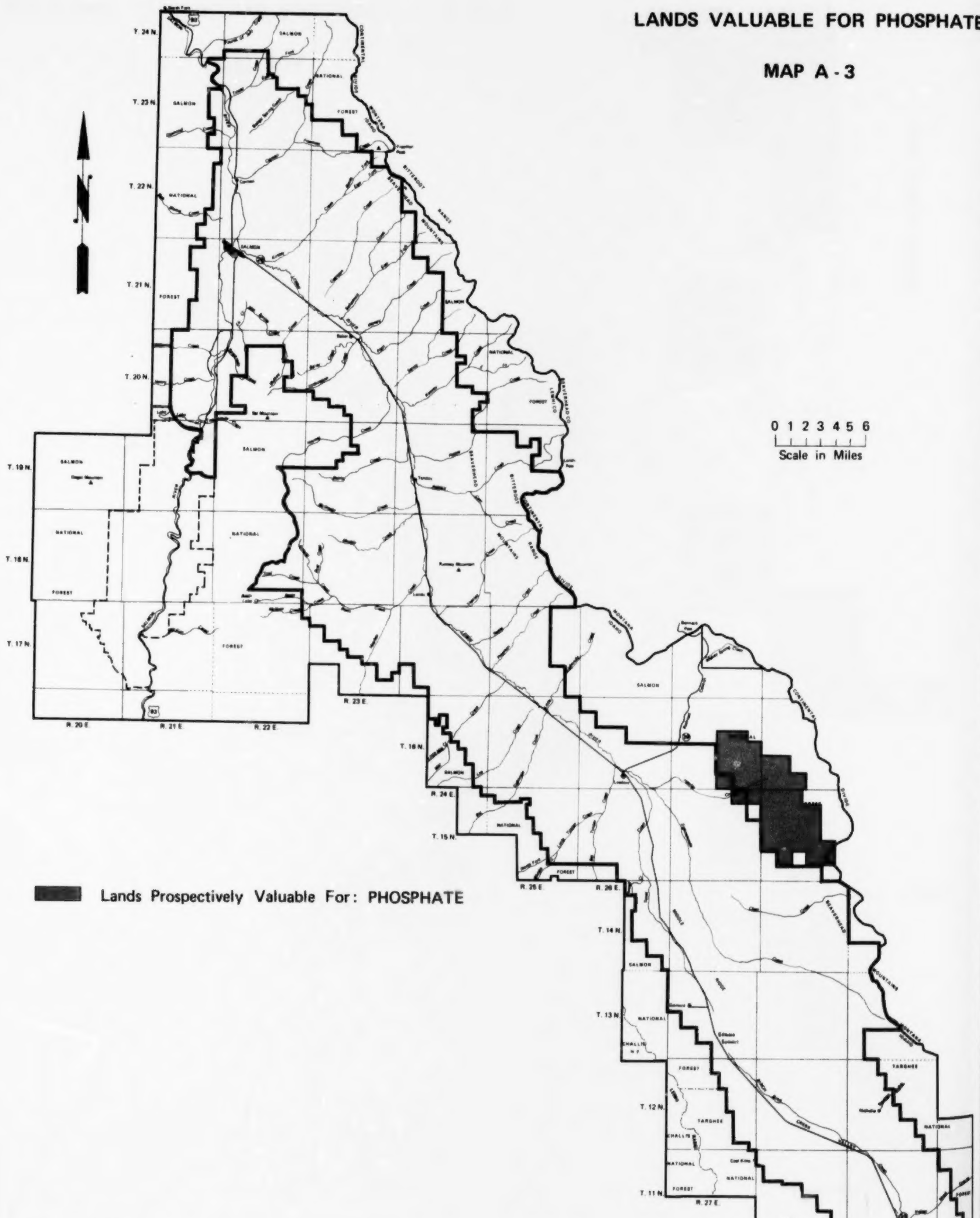
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTERROOT
BEAVERHEAD
MOUNTAINS
RANGE
SALMON
NATIONAL
FOREST
SALMON
RIVER
LEMHI CO.
BEAVERHEAD CO.
Tendoy
Leadore
Gilmore Summit
TARGHEE
CHALLIS N.F.
CHALLIS
Nicholia
Lemhi Co.
Butte Co.
Clark Co.
0 1 2 3 4 5 6
Scale in Miles

▨ Lands Prospectively Valuable For:
GEOTHERMAL RESOURCES

(Godwin, 1977)

LANDS VALUABLE FOR PHOSPHATE

MAP A - 3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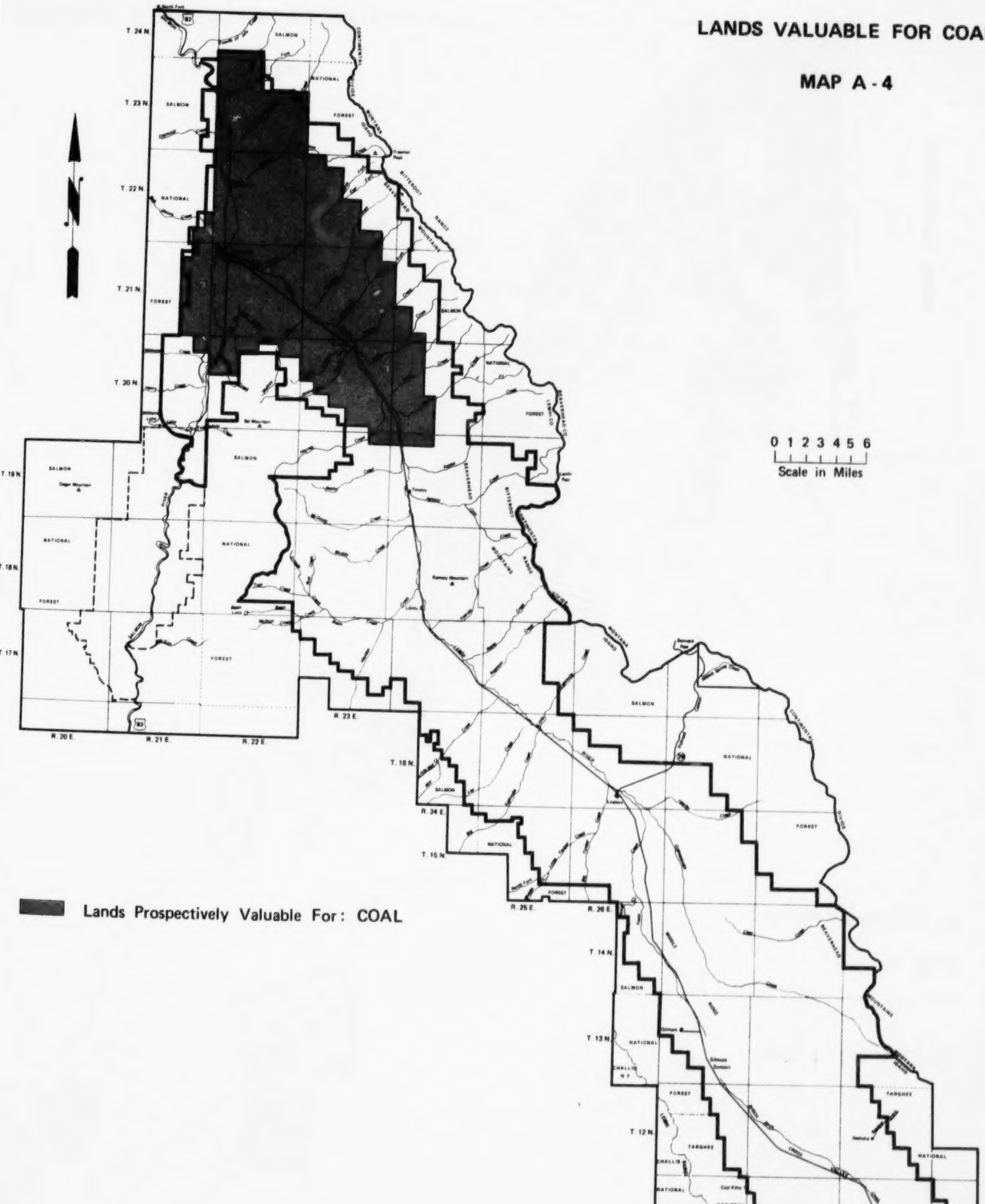
SALMON
NATIONAL
FOREST
TARGHEE
CHALLIS
N.F.
SALMON
LEADORE
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTERROOT
RANGE
BEAVERHEAD
MOUNTAINS
LEMHI CO.
BUTTE CO.
CLARK CO.
93
N
0 1 2 3 4 5 6
Scale in Miles

▇ Lands Prospectively Valuable For: PHOSPHATE

(Staatz, 1976)

LANDS VALUABLE FOR COAL

MAP A - 4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R. 26 E.
R. 27 E.
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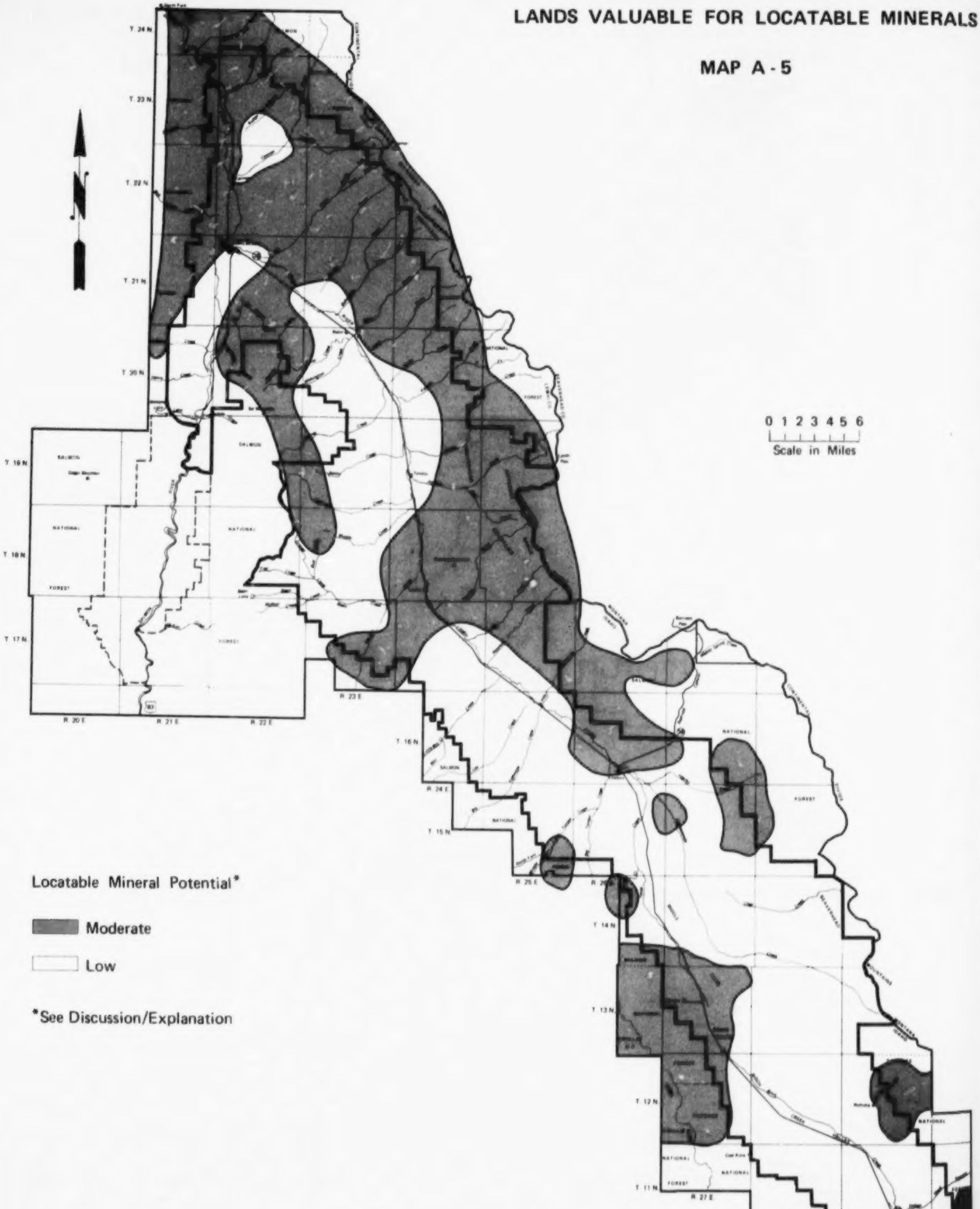
SALMON
NATIONAL
FOREST
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
LEMHI CO.
BEAVERHEAD CO.
LEMHI RIVER
Leadore
Tendoy
Gilmore
TARGHEE
CHALLIS N.F.
Coal Kilns
0 1 2 3 4 5 6
Scale in Miles

▨ Lands Prospectively Valuable For: COAL

LANDS VALUABLE FOR LOCATABLE MINERALS

MAP A-5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Scale in Miles
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T 14 N
T 13 N
T 12 N
T 11 N
R 20 E
R 21 E
R 22 E
R 23 E
R 24 E
R 25 E
R 26 E
R 27 E
R 28 E
R 29 E
R 30 E
SALMON
NATIONAL
FOREST
93
28
BUTTE CO.
CLARK CO.

Locatable Mineral Potential*

▨ Moderate

☐ Low

*See Discussion/Explanation

APPENDIX B

RANGE MANAGEMENT

APPENDIX B

RANGE MANAGEMENT

SELECTIVE MANAGEMENT

A worksheet (Figure B-1) containing specific criteria was developed to categorize allotments. Six specific criteria were addressed for each allotment. The criteria were as follows:

1. Is the public land proposed for retention or disposal?

2. Is the range condition and trend satisfactory or unsatisfactory?

3. Is the site potential for improvement low, moderate, or high?

4. Are the resource conflicts low, moderate, or high?

5. Are there opportunities for positive economic return from public investment?

6. Is present management satisfactory?

Of the six criteria, the resource-specific criteria (Items 2 through 5 above) were considered the most significant in categorizing allotments. Utilizing the six specific criteria, each allotment was placed into one of three categories: maintain, improve, or custodial.

Maintain (M) allotments are described as follows:

> Most of the public lands in the allotment are proposed for retention; the range condition and trend are satisfactory; site potential for improvement is moderate or low; resource conflicts are moderate or low; opportunities may exist for positive economic return from public investments; and present management appears satisfactory. Generally, these allotments have no significant resource problems and present management is achieving management goals.

Improve (I) allotments are described as follows:

> Most of the public lands in the allotment are proposed for retention; range condition and trend are unsatisfactory; site potential for improvement is high; resource conflicts are high; opportunities exist for positive economic return from public investments; and present management appears to be unsatisfactory. An allotment may be placed into the Improve category if one or more of the four resource-specific criteria are applicable.

FIGURE B-1

ALLOTMENT CATEGORIZATION WORKSHEET

Allotment: ______________________________

Retention Disposal	C

Comments: ______________________________
____
____
____

Range Condition and Trend Satisfactory Unsatisfactory	I

Comments: ______________________________
____
____
____
____

Site Potential for Improvement Low Moderate High	I

Comments: ______________________________
____
____
____

Resource Conflicts Low Moderate High	I

Comments: ______________________________
____
____
____
____

Positive Economic Return Low Moderate High	I

Comments: ______________________________
____
____
____
____

Present Management Satisfactory Unsatisfactory

C M I

Final Allotment Categorization

M - Maintain
I - Improve
C - Custodial

Custodial (C) allotments are described as follows:

> Most of the public lands in the allotment are proposed for retention or disposal; range condition and trend are satisfactory; site potential for improvement is low or moderate; resource conflicts are low or moderate; opportunities do not exist for positive economic return from public investments or are constrained by technology or economic factors; and present management appears satisfactory.

Distribution of public funds and involvement by BLM personnel will have highest priority for the Improve allotments, followed by the Maintain and Custodial allotments. Within these categories, allotments will be prioritized according to the degree of resource problems and the need for immediate improvement. Improvement potential in terms of a positive return on public investments will also be a priority criterion. Allotment priority may also improve when interested parties are willing to contribute with the BLM in cost-share improvements for obtaining or improving resource conditions.

The management category for an allotment may change when resource conditions change or when additional data becomes available.

LIVESTOCK CONVERSIONS

No permanent livestock conversions will be authorized until the Lemhi Resource Management Plan has been completed. Until then, conversions will be addressed on a case-by-case basis and may be allowed on a temporary basis.

The Lemhi Resource Area Livestock Conversion Policy is based upon current policy, guidance, and regulations. The following general guidelines currently apply:

1. A technical report on an allotment's capability for the new kind of livestock is prepared. This report serves to develop the proposed action and alternatives in the environmental assessment.

2. All conversions must initially be conservative (75 percent conversion for the first three years as modified by suitability).

3. The amount of conversion from one kind of livestock to another must be in proportion to the allotment's capability for grazing the new kind of livestock.

4. Environmental assessments are completed to identify impacts and the mitigating measures necessary to meet multiple use objectives.

5. Concerns of other permittees in the affected allotment and of the Idaho Fish and Game Department must be considered in the analysis of the proposed conversion.

6. Necessary structural improvements, such as fencing and water developments, must be completed prior to allowing the conversion.

7. Results of ongoing monitoring studies will be used to determine whether the amount of conversion was satisfactory.

8. Final amounts converted will depend on the desired season of use, initial balance between spring and fall preference, and resource response.

Future Livestock Use Adjustments

If the results of resource monitoring studies show that the proposed grazing management is not meeting the multiple use objectives of the Lemhi Resource Management Plan, livestock use adjustments will be made in accordance with the BLM grazing administration regulations and existing policy. Livestock use adjustments could take the form of changes in the grazing system, changes in season of use, reductions or increases in active preference, or a combination of all of these.

RANGE IMPROVEMENTS

The following design features, construction practices, and mitigation measures are common to the several kinds of range improvements proposed in the Lemhi RMP. Structural improvements are generally installations which help control livestock distribution, while nonstructural improvements are vegetation treatments.

Structural Improvements

Fences

New fences would provide exterior allotment boundaries, divide allotments into pastures, and protect sites having other values from livestock disturbance. Fencing would be three-strand barbed-wire built in accordance with BLM specifications. In big game habitat, fences would be constructed with a top wire no higher than 38 inches above ground level and a smooth bottom wire at least 18 inches above ground level. Existing fences that create wildlife movement problems would be modified. Where fences cross existing roads, cattleguards or gates would be installed. Gates would also be installed as needed in other areas. Fence lines may be cleared to the extent necessary for construction and maintenance, but mechanical clearing of vegetation to bare soil would not be allowed.

Cattleguards

Cattleguards would be 8 feet wide and 12 to 24 feet long, depending upon the traffic type and pattern.

Springs

Springs would be developed or redeveloped using a backhoe to install a buried collection system. The collection system would be covered and fitted with a delivery pipe. A pipeline would be installed to deliver water to a trough for use by livestock and wildlife. Normally, the spring area would be fenced following development to exclude livestock. Riparian zones would be protected at the spring source.

Pipelines and Troughs

Water pipelines would be buried in a trench excavated by a backhoe, with excavated material being used for the backfill. Rigid plastic pipe may be used. Flexible pipe may also be installed with a ripper tooth. Valves would be installed at intervals along each pipeline to allow easy drainage to prevent freezing. Troughs would be placed, where needed, to provide an even distribution of livestock water. Each trough would have a bird ladder to allow wildlife use and escape. Separate wildlife water storage and watering devices may also be constructed at regular intervals. Disturbed areas would be rehabilitated.

Roads

Several miles of new or existing roads would be bladed to provide access to new water developments and to grazing areas that now receive little use. Existing vegetation would be eliminated and the soil surface would be bared. Depending on the amount of traffic, herbaceous vegetation could reestablish itself on the new roads without impairing their function.

Nonstructural Improvements

Prescribed Fire

Prescribed fire may be used to release the native understory from sagebrush competition in areas proposed for brush control. Burning would be done to meet the objectives of this plan and in accordance with site-specific prescribed burn plans. Plant succession would be carefully weighed in preparing burn plans. Where wildlife habitat is a major consideration, areas would be burned to create a mosaic of shrubbery and herbaceous vegetation. Burned areas would be rested from livestock grazing for at least two growing seasons following treatment.

Interseeding

Desirable plant species would be interseeded with existing vegetation. A seed dribbler, small scalper/seeder, or range drill would be used to interseed strips. Broadcast seedings could also be used. The seed mixture would include grasses and forbs as appropriate for the specific site and management objectives. Treated areas would not be grazed for at least two growing seasons following treatment. Whenever practical, interseeding would be used in preference to plowing, disking, and seeding.

Plowing, Disking, and Seeding

This treatment would be used to eliminate undesirable plant species or competition in order to establish new seedings. Treatment would be done on areas having a low potential under other management practices. Size limitations on individual treatment areas may be necessary in major wildlife habitat areas. Seed would generally be planted with a standard rangeland drill. The seed mixture would include grasses, forbs, and shrubs as appropriate for the specific site and management objectives. Treated areas would not be grazed for at least two growing seasons following treatment.

Chemical Control of Vegetation

The use of chemicals to control unwanted vegetation would be considered when it was an environmentally acceptable and cost-effective way of meeting management goals and objectives. All regulations and policies regarding the use of chemicals on public land would be followed.

Chaining and Rotobeating

In general, this treatment would be used to release the native understory from shrub competition in areas where prescribed burning is undesirable due to soil erosion.

A tractor pulling a chain, rail, or rotobeater would be used, creating areas of mosaic patterns. Chained areas would not be grazed for at least one growing season following treatment. Other treatment areas would be evaluated for rest on a case-by-case basis.

GRAZING SYSTEMS

Rest-Rotation Grazing

Under a rest-rotation grazing system, an allotment is divided into pastures, usually with comparable grazing capacities. Grazing is deferred on various pastures during succeeding years in a rotation sequence. A complete rest for a year is also included in a planned sequence. Each pasture is systematically grazed and rested so that livestock production and other resource values are provided for, while the vegetation cover is simultaneously maintained or improved. This practice protects soil from wind and water erosion.

Any of several rest-rotation grazing systems may be used, depending on the objectives for the allotment and number of pastures.

Deferred Rotation Grazing

Deferred rotation is the postponement of grazing on different parts of an allotment in succeeding years. This allows each pasture to rest successively during the growing season to permit production of seed, establishment of seedlings, and restoration of plant vigor (American Society of Range Management 1964). One or more pastures are grazed during the spring, while the remaining pasture(s) is rested until after seed ripening of key species and then grazed. Deferred rotation grazing differs from rest-rotation grazing in that no yearlong rest is provided.

Deferred Grazing

Deferred grazing is the postponement of grazing by livestock on an area for a specified period of time during the growing season. Under this system, grazing begins after key plants have reached an advanced state of development in their annual growth cycle. The growing season rest provided by this system promotes reproduction of plants, establishment of new plants, or restoration of the vigor of old plants (American Society of Range Management 1964).

Seasonal Grazing

Seasonal grazing is use by livestock during one or more seasons of the year. Seasonal grazing occurs during the same season each year and does not involve rotation or deferment. For RMP purposes, seasonal grazing also includes season-long grazing (livestock use throughout the grazing season). The most common types of seasonal grazing in the planning area are spring-fall sheep grazing, spring-fall cattle grazing, season-long cattle grazing, and winter sheep grazing.

METHODOLOGY USED IN THE VEGETATIVE INVENTORY

A vegetative inventory was conducted during the 1981, 1982, and 1983 field seasons in conjunction with a third-order soil survey. The inventory gathered information on range site classifications, present vegetation, ecological condition, and apparent trend.

Classification

Two classification systems were used during the inventory. Sites with remnant native plant species were classified according to the Soil Conservation Service's (SCS's) Range Sites Inventory Method (USDA-SCS 1976). This system classifies sites according to geographic region, soil characteristics, mean annual precipitation, and potential plant communities to the extent that these can be interpreted for the site.

Areas with exotic species introduced by seeding were classified with a modified technique. A seeding was classified according to geographic region, soil characteristics, and mean annual precipitation. The existing plant community was rated on the amount of seeded species occupying the site. Native vegetation on seeding sites was not given an ecological rating.

Ecological Condition

Inventory crews first identified and delineated the boundaries for the sites to be inspected. Estimates of plant species composition, based on weight, were then made for the plant community found on each site. The present species composition was compared to the expected potential species composition from the SCS's Range Site Descriptions. A condition rating was computed for the vegetation on each site. This rating represents the amount of departure from the potential plant community (see Range Condition Worksheet).

Four condition classes are set forth by the SCS: excellent, good, fair, and poor. An excellent condition community would have 76 to 100 percent of the kinds, amounts, and proportions of vegetation produced in the potential plant community. Good, fair, and poor condition classes would have 51 to 75 percent, 26 to 50 percent and 0 to 25 percent, respectively, of these factors.

Five condition classes were assigned during the vegetative inventory: excellent, good, fair, poor, and unmapped.

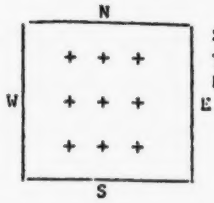
The unmapped class represents areas that were not classified to soil series level. They contain a high percentage of rubble land or rock outcrop and have steep slopes of from 50 to 80 percent. Timber types were included in this classification.

Range Trend

Present range trend was determined using permanent, 3-foot by 3-foot photo trend plots and observed apparent trend ratings made during the vegetative inventory. Allotments with permanent photo trend plots (eight allotments) were given a trend rating from those plots. If no long-term data was available, allotments were rated on observed apparent trend reading (see Observed Apparent Trend form).

PROJECTING ECOLOGICAL CONDITION AND TREND

Projections of ecological (range) condition and range trend were made after considering present condition, present vegetative composition, current trend, wildfire, proposed stocking levels, grazing systems, and other management facilities. The following assumptions were made:



SEC___
TWP___
RNG___

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RANGE CONDITION WORKSHEET

Allotment ______________________
District & P.U. No. ______________________
Ecological Site Name ______________________
Vegetative Type ______________________
Date ______________________
Aerial Photo No. ______________________
Examiner ______________________
Write-up No. ______________________

Plant Groups	Plant Names or Symbols	% or Weight Present	% or Weight Potential
Grasses and Grass-like Plants			
___ % or #			
Forbs			
___ % or #			
Shrubs and Trees			
___ % or #			
100% or #	TOTALS (100% or Pounds)		

Condition Indicators
(Check ones that apply)

% Potential Vegetation	Current Erosion	Stand for Site	Preferred Species Present	Final Condition Rating
100-76	Stable	3/4 to full	Many to all 30+%	Excell.
75-51	Slightly active	1/2 to 3/4	Several to Many 20-30%	Good
50-26	Moderately active	1/4 to 1/2	Few to Several 10-20%	Fair.
25-0	Critical or Severely active	0 to 1/4	None to Few 0-10%	Poor

Ground Cover Data	%
Litter	
Veg.	
Bare	
Rock	
	100%

Remarks

ESTIMATED PRODUCTION:

Total Lbs/Ac (air dry) ______________________ ______________________
Usable Lbs/Ac ______________________ ______________________
(Soil Mapping Units)
A/AUM ______________________

OBSERVED APPARENT TREND - Range Condition

		Possible Points	Rating*	Remarks
1.A. VEGETATION SEEDED	More than 50 percent of the total vegetation is composed of the seeded species. If shrubs are present, the seeded species occur mainly in open spaces between shrubs. Undesirable annual vegetation is absent or nearly so.	5-6		
	25 to 50 percent of the vegetation is composed of the seeded species. If shrubs are present, some seeded species occur in open, unprotected areas. Limited amounts of undesirable annual vegetation are present.	3-4		
	Less than 25 percent of the vegetation is composed of the seeded species. Seeded species are generally protected by shrubs or rocks. There is an over-abundance of undesirable annuals and/or shrubs.	0-2		
1.B. VEGETATION NATIVE	There is, or tends to be, a heterogeneous mixture of grasses, forbs, and shrubs across the landscape. Major native forage grasses occur in open, unprotected areas. Invaders or unnatural annual vegetation is less than 5 percent. Browse species show no evidence of hedging.	5-6		
	Areas of pure stands of undesirable perennials or invading annuals are present. Some major native forage plants occur in open, unprotected areas. Invader or unnatural annuals make up less than 15 percent of the production. Browse species show moderate hedging.	3-4		
	Poor variation exists among grasses, forbs, and shrubs, with an over-abundance of undesirable annuals or shrubs. Major native forage species are generally protected by shrubs or rocks. Browse species showing heavy hedging.	0-2		
2. VIGOR	Desirable grasses, forbs, and shrubs are vigorous—showing good health. These plants should have good size, color, and should produce abundant herbate.	7-10		
	Desirable grasses, forbs, and shrubs have moderate vigor. They are medium-size with fair color and producing moderate amounts of herbage; some seed stalks and seedheads are present.	3-6		
	Desirable grasses, forbs, and shrubs have low vigor. They appear unhealthy with small size and poor color. Portions of clumps or entire plants are dead or dying. Seed stalks and seedheads almost non-existent except in protected areas.	0-2		
3. AGE CLASS DISTRIBUTION AND REPRODUCTION	There is seedling establishment (plants over two years old) of desirable climax species in open spaces between plants and along edges of soil pedestals. There is evidence that the older, less desirable plants are dying and are being replaced by the desirable climax species.	7-10		
	Seedlings of individual species are becoming established at about the same rate as the older plants are dying. There is little evidence of change in species composition. Seedlings are primarily in protected spots.	3-6		
	Mature and dying plants are being replaced by seedlings of invader species or undesirable climax species. Any seedlings of the desirable species are found only in protected areas.	0-2		
4. SURFACE LITTER	Surface litter is accumulating in place.	5		
	Moderate movement of surface litter is apparent and deposited against obstacles.	4		
	Very little surface litter is remaining.	0-3		
5. SOIL MOVEMENT	None or slight visual evidence of soil movement. No exposed roots.	4-5		
	Moderate movement of soil particles visible. Some plants have roots exposed.	2-3		
	Movement occurs with each event. Soil and debris deposited against minor obstructions. Terracing may be present. Many plants have roots exposed.	0-1		
		Total		

*See instructions.

7-18	Downward
19-26	Static
27-36	Upward

General Remarks:

1. All trend projections are for the long-term (20 years).
2. All seeding would be done in poor and fair condition areas, changing them from poor to disturbed.
3. Increased grazing, when accompanied by range developments, would change existing trends.
4. The trend on new seedings and brush control areas would be stable once the desired results were achieved. Long-term trends were considered to be stable.
6. Low-fair condition areas with few native perennials (highly disturbed) may show upward trend with decreases in grazing but would not change condition class.
7. Areas in high-poor condition could be expected to improve to fair condition (5 percent increase maximum) with upward trend.

DETERMINING THE PROPOSED STOCKING RATE

Allotments with a 5-year average use that is below the estimated stocking level were not adjusted. The allotments generally had excessive amounts of nonuse or were originally adjudicated below the stocking levels needed to protect other resource values as proposed in a given alternative.

The majority of allotments did have available forage problems and were in less than satisfactory range condition and trend because of heavy sagebrush densities and other factors. After reviewing the proposed increases in wildlife numbers, the range and wildlife staff felt these allotments were not able to provide enough forage for wildlife needs.

Upward Adjustments

Increases in active preference resulting from nonstructural range improvements were based on the expected increase in forage production as correlated with the potential for the range site treated. Stocking rates in acres per AUM from allotments in similar range sites of satisfactory range condition were used to establish new stocking rates.

In some allotments, monitoring data indicated that increases could be allowed while meeting existing objectives. These increases above active preference could be allowed because of present management practices. Also, some allotments were proposed for increases when available data indicated that these allotments were stocked below the acre per AUM figure of similar allotments. Similar allotments have the following in common: kind of livestock, improvements, soil sites and potentials, and satisfactory range condition and trend.

Downward Adjustments

In some allotments, the average use was considered excessive according to the available monitoring and ecological range condition and trend data. These allotments were adjusted using an acre per AUM figure that allowed for the improvement of resource conditions and the proposed increase in wildlife numbers. Other allotments lost suitable acreage for livestock grazing because of the proposed land transfers.

In some allotments, the present resource conditions are not satisfactory. Management is satisfactory, but a lack of desirable understory species or the presence of heavy brush density results in problems. In these allotments, changes in active preference were proposed. In other allotments, existing management is unsatisfactory. In these allotments, downward adjustments in active preference were proposed based on monitoring data.

In most cases, downward adjustments were made based on numbers of acres per AUM, general observations, and professional judgement. In these cases, allotments were compared with other allotments in the district with similar range sites and forage production potential.

Alternative A

In Alternative A, the 5-year average use was the baseline used to determine the proposed stocking level. For some allotments, less than 5 years of actual use was averaged because wildfires closed a portion or all of the allotment to grazing for a time. Also, no actual use was averaged for allotments that have had no grazing privileges attached for the last 5 years.

Alternative B

In Alternative B, the proposed stocking level was based on improvement of one-third of the total acres that were in fair condition. If an allotment had 10,000 acres with 2,000 acres in fair condition and active preference was 1,300 AUMs, then:

$$\frac{2{,}000 \text{ acres}}{3} = 666 \text{ acres improved}$$

$$\frac{666 \text{ acres}}{10{,}000 \text{ acres}} = 7\% \text{ increase}$$

$$\begin{array}{r} 1{,}300 \text{ AUMs} \\ \times \quad 1.07 \\ \hline 1{,}109.59 \end{array} \text{ AUMs new stocking level}$$

Alternative C

For Alternative C, a flat rate of 15 acres per AUM was used for the short term and 12 acres for the long term.

On a 10,000-acre allotment, the stocking rate would be:

$$\frac{\text{10,000 acres}}{\text{15 acres/AUM}} = \text{666 AUMs (short term)}$$

$$\frac{\text{10,000 acres}}{\text{12 acres/AUM}} = \text{833 AUMs (long term)}$$

Alternative D

For Alternative D, a flat rate of 9 acres per AUM was used for the short term. The long-term stocking rate was based on a 25 percent increase over the short-term value.

$$\frac{\text{10,000 acres}}{\text{9 acres/AUM}} = \text{1,111 AUMs (short term)}$$

$$\begin{array}{rl} & \text{1,111 AUM} \\ \times & \underline{1.25} \\ & \text{1,389 AUMs (long term)} \end{array}$$

Alternatives E, F, and G

For Alternatives E, F, and G, a flat rate of 9 acres per AUM was used for the short-term. The long-term stocking rate was based on a 10 percent increase over the short-term value.

$$\frac{\text{10,000 acres}}{\text{9 acres/AUM}} = \text{1,111 AUMs (short term)}$$

$$\begin{array}{rl} & \text{1,111 AUM} \\ \times & \underline{1.10} \\ & \text{1,221 AUMs (long term)} \end{array}$$

Transfer Category Allotments

The adjudicated stocking rate was used to estimate reductions in preference due to transfer of land within grazing allotments from federal ownership.

$$\text{Adjudicated Stocking Rate} = \frac{\text{Total acres in a grazing allotment}}{\text{active preference (acres/AUM)}}$$

For example, an allotment with 1,000 acres in a transfer category and an adjudicated stocking rate of 5.7 acres per AUM would be reduced 175 AUMs as shown below.

$$\frac{1{,}000 \text{ acres}}{5.7 \text{ acres/AUM}} = 175 \text{ AUMs}$$

TABLE B-1
POTENTIAL ACRES AND AUMS IN TRANSFER CATEGORY
(Based on Current Stocking Level)

Allot. #	Allotment Name	ALT. A		ALT. B		ALT. C		ALT. D		ALT. E		ALT. F	
		Acres	AUMs	Acres	AUMs	Acres	AUMs	Acres	AUMs	Acres	AUMs	Acres	AUMs
6102	Badger Springs	80	13										
6106	South Carmen	120	18			80	12			80	12	80	12
6109	Kirtley Creek			176	21	176	21			176	21	176	21
6110	Geertson			98	8	140	11			140	11	159	13
6113	Bohannon					10	1	10	1	10	1		
6116	Hot Springs	120	12							320	26		
6118	Joe Moore					40	5	40	5	40	5	40	5
6119	E. Fork Wimpey	80	7			80	7	80	7	80	7	80	7
6120	Pratt Creek	80	14			40	7	120	21	120	21	80	14
6122	County Road	40	7					360	65				
6123	Baker Creek	20	4										
6129	Dummy	40	1										
6201	Haynes Creek	110	21			40	8	80	15	80	15	80	15
6202	Lower Basin	160	43			70	19	70	19	230	62	70	19
6203	Baldy Basin	20	3							160	27		
6204	McDevitt							120	20	120	20		
6205	Grouse	520	66					40	5	1,400	177		
6208	Roostercomb	10	2			90	17	80	15	90	17	90	17
6209	Little Sawmill	165	28			190	32	280	47	570	95	240	40
6211	Walters	200	62			220	68	20	6	220	68	220	68
6212	Lee Creek					60	15	60	15	60	15	60	15
6213	Big Springs	840*	116	80	11	160	22	160	22	400	56	320	44
6214	Horse Heaven	1,484*	96			80	5	200	13	80	5	80	5
6215	Everson Creek	120	38	160	50	280*	85	280*	85	280*	85	280*	85
6216	Big 8-Mile	275*	53			275*	53	275*	53	275*	53	275*	53
6217	Nef #1	80*	11	80*	11			80*	11	80*	11	80*	11
6218	Nef #2	120*	38	120*	38	120*	38	120*	38	120*	38	120*	38
6219	Dump			320*	27			60	5	320*	27		
6221	Deer Park			240*	40	240*	40	240*	40	240*	40	240*	40
6222	Adams Creek			240*	27	240*	27	240*	27	240*	27	240*	27
6224	Timber Creek	40	5			40	5			40	5	40	5
6225	Leadore Hill					40	2			40	2	40	2
6226	Sandy Creek	80	11			80	11	40	5	80	11	80	11
6229	Warm Springs	12	4	12	4	12	4	12	4	12	4	12	4
6230	Pattee Creek									160	30		
6231	Gould Basin									40	5		
6234	Dry Canyon	50	7			20	3	20	3	80	11	20	3
6235	Napo	40	4										
6236	Yearian	46	6					120	17	120	17		
6239	Little 8-Mile	90	9										
6240	Mollie Gulch	140	12			180	16	280	25	340	30	180	16
6302	Leadore			520	13	240	6	80	2	520	13	320	8
6303	Leadville					40	3	40	3	40	3	40	3
6304	Hawley Creek							420	36	420	36		
6305	Bull Creek			160	21	160	21	80	10	160	21	160	21
6306	Tex Creek	240	24			640	62	640	62	640	62	640	62
6307	Powderhorn			80	14	160	28	880	153	880	153	160	28
6308	Chamberlain Cr.			320	24	280	21	320	24	320	24	320	24
6309	Center Ridge			160	24	160	24	40	6	160	24	160	24
TOTALS		5,422	735	2,766	333	4,683	700	5,987	885	9,983	1,393	5,182	760

*These allotments would be eliminated.

TABLE B-2

LEMHI RMP AREA GRAZING ALLOTMENTS AND LIVESTOCK USE

ALLOTMENT NAME	ALLOT. #	NO. OF PERMITTEES	ACRES BLM	ACRES STATE	ACRES PRIVATE	BLM ECOLOGICAL CONDITION EXCELLENT	GOOD	FAIR	POOR	UNMAPPED	APPARENT TREND	MANAGEMENT STATUS	KIND OF LIVESTOCK	SEASON OF USE FROM	TO
Tower Creek	6101	7	4,409			39	4,241			129	S	I	C	05/01	09/30
Badger Springs	6102	9	9,210	640	120	440	7,413	1,168		189	S	I	C/S H	05/01 05/01	08/11 08/31
Bird Creek	6103	2	1,720				513	731		476	S	I	C	05/16	06/10
Diamond Creek	6104	1	309				133	100	46	30	S	C	C	05/12	06/17
Freeman Creek	6105	1	1,919				316	164		1,439	S	I	C	05/16	08/15
South Carmen Creek	6106	8	15,042	225			5,680	7,396		1,966	S	I	C	05/16	08/15
Derlar Creek	6107	3	852				265	587			S-D	I	C	05/12	06/02
Fenster Creek	6108	1	205				137	68			S-D	C	C	05/01	06/05
Kirtley Creek	6109	1	2,197	705			979	25		1,193	S	C	C/S	05/01	08/31
Geertson Creek	6110	3	11,762	135	722		2,360	4,597		4,805	S	I	C	05/01	09/10
Bob Moore	6111	1	1,148	560			164	686	149	149	S-D	I	C	05/12	05/31
Chipps Creek	6112	1	1,669				119	1,168		382	U	C	C	05/11	06/11
Bohannon Creek	6113	1	6,249	636			2,016	734		3,499	S	M	C	05/17	10/12
West Fork Wimpey Creek	6114	1	2,750				226	455		2,069	U	I	C	05/01	08/31
Coal Mine Gulch	6115	1	1,456				586	816		54		I	C	05/01	06/30
Hot Springs	6116	5	9,523	240			2,400	5,898		1,225	S	I	C	05/01	07/15
Perreau Creek	6117	2	2,194				860	1,291		43	U-S	I	C	05/11	06/10
Joe Moore	6118	2	2,263	640			807	1,444		12	U-S	I	C	05/03	08/07
East Fork Wimpey Creek	6119	1	1,692					437		1,255	D	M	C	05/01	07/15
Pratt Creek	6120	1	4,319	83				2,032		2,287	S	I	C	05/16	09/30
Pronghorn	6121	2	771					499		272		M	C	05/21	08/20
County Road	6122	2	362					335		27	D	C	C	05/09	07/02
Baker Creek	6123	3	5,499	80			2,859	2,449		191	S	I	C	05/16	09/15

U = Upward	I = Improve	C = Cattle
S = Static	M = Maintain	H = Horses
D = Downward	C = Custodial	S = Sheep

TABLE B-2 (Continued)
LEMHI RMP AREA GRAZING ALLOTMENTS AND LIVESTOCK USE

ALLOTMENT NAME	ALLOT. #	NO. OF PERMITTEES	ACRES			BLM ECOLOGICAL CONDITION					APPARENT TREND	MANAGEMENT STATUS	KIND OF LIVESTOCK	SEASON OF USE	
			BLM	STATE	PRIVATE	EXCELLENT	GOOD	FAIR	POOR	UNMAPPED				FROM	TO
Williams Creek	6124	2	2,867				459	1,302		1,106	S	I	C	05/01	06/30
Henry Creek	6125	1	1,459			220	808			431	S	M	C	05/06	06/15
Lake Creek	6126	2	2,464				253	2,017		194	S	I	C	05/01	08/15
Ten Mile	6127	1	1,466				528			938		M	C	05/01	07/15
Wimpey Creek	6128	1	2,004	218			701	511		792	S	I	C	05/09	07/02
Dummy Creek	6129	0	2,812				234	582		1,996		I			
Haynes Creek	6201	4	7,157	2,600	320	168	6,322	506		161	S	M	C	05/01	09/30
Lower Basin	6202	2	2,894	480			2,025	815		54	U	I	C	05/16	09/30
Baldy Basin	6203	5	11,607		80	273	7,008	2,949	53	1,324	U	I	C	05/16	09/30
McDevitt Creek	6204	1	13,373	1,160	100	47	9,336	3,990				I	C	05/21	10/15
Grouse Creek	6205	7	17,617	716			9,445	7,477		695		I	C/H	05/01	10/15
Basin Creek	6206	1	67							67		C	C	06/16	11/15
McNutt Creek	6207	1	638				638					C	C	06/01	06/27
Roostercomb	6208	2	6,988	483			2,204	4,511		273	S	I	C	05/11	09/28
Little Sawmill	6209	2	9,118	1,280	500		5,247	3,657		214	U-S	I	C	05/01	09/30
Mill Creek	6210	1	344				321			23		C	C	05/22	08/11
Walters	6211	2	1,703				1,427			276	U	I	C	05/01	06/15
Lee Creek	6212	1	2,149				458	1,621		70	U	I	C	05/11	06/30
Big Springs	6213	1	1,042					701	341		D	M	C H	05/01 05/01	09/30 07/31
Horse Heaven	6214	2	1,484					1,484			D	I	C H	05/20 06/05	06/19 09/30
Everson Creek	6215	2	279							279		C	C H	05/01 06/01	10/15 09/30
Big Eightmile	6216	2	315							315		C	C H	05/11 05/11	06/30 11/15

U = Upward	I = Improve	C = Cattle
S = Static	M = Maintain	H = Horses
D = Downward	C = Custodial	S = Sheep

TABLE B-2 (Continued)
LEMHI RMP AREA GRAZING ALLOTMENTS AND LIVESTOCK USE

ALLOTMENT NAME	ALLOT. #	NO. OF PERMITTEES	ACRES BLM	ACRES STATE	ACRES PRIVATE	BLM ECOLOGICAL CONDITION EXCELLENT	GOOD	FAIR	POOR	UNMAPPED	APPARENT TREND	MANAGEMENT STATUS	KIND OF LIVESTOCK	SEASON OF USE FROM	TO
NEF #1	6217	1	119					119			D	C	S	05/01	06/30
NEF #2	6218	1	320					320			S	C	C	05/06	10/02
Dump	6219	1	361					361			S	C	C	05/01	06/20
State Section	6220	1	434	640				434			S	C	C	05/13	06/27
Deer Park	6221	1	234					222		12	S-D	C	C	05/20	06/19
Adams Creek	6222	1	234				171	63			S	C	C	05/16	08/15
Milk Creek	6223	1	844					844			S	I	C H	05/01 05/01	06/15 11/30
Timber Creek	6224	5	6,947		207		2,069	4,793		85	S-D	I	C H S	05/06 05/01 05/06	06/30 06/06 10/31
Leadore Hill	6225	1	2,713				884	1,212		617	S-D	I	C S	05/16 05/01	07/31 07/23
Sandy Creek	6226	3	3,605	640			3,333	219		53	S	M	C	05/01	08/31
Kinney Creek	6227	1	870				389	481			S	M	C	05/11	08/05
Rattlesnake	6228	2	1,374				1,038	327		9	S	M	C	05/11	09/10
Warm Springs	6229	1	6,619				3,245	3,374			S	I	C	05/16	10/30
Pattee Creek	6230	2	5,381				3,930	1,331		120	S	I	C	05/16	09/30
Gould Basin	6231	1	7,213	142	565		5,427	1,690	31	65	S	M	C/H	05/11	09/26
Squaw Creek	6232	1	7,472	160	145		6,254	1,161		57		I	C	05/21	09/20
Pritchard Gulch	6233	2	1,736				1,083			653	U	I	C	05/11	09/21
Big Dry Canyon	6234		2,080		45		1,060	167		853	U	I			
Napo Canyon	6235	2	5,335				1,665	3,320		350		I	C/S	05/10	08/31
Yearian Creek	6236	5	24,878	1,380			11,796	7,973		5,109	U	I	C H	05/11 05/01	10/20 11/30
Lower Reese Creek	6237	1	1,152					982		170	S	M	C	05/01	09/30

U = Upward
S = Static
D = Downward

I = Improve
M = Maintain
C = Custodial

C = Cattle
H = Horses
S = Sheep

TABLE B-2 (Continued)
LEMHI RMP AREA GRAZING ALLOTMENTS AND LIVESTOCK USE

ALLOTMENT NAME	ALLOT. #	NO. OF PERMITTEES	ACRES			BLM ECOLOGICAL CONDITION					APPARENT TREND	MANAGEMENT STATUS	KIND OF LIVESTOCK	SEASON OF USE	
			BLM	STATE	PRIVATE	EXCELLENT	GOOD	FAIR	POOR	UNMAPPED				FROM	TO
Cedar Gulch	6238	1	2,660	300			1,062	1,365		233	S	I	C	05/01	09/30
Little Eightmile	6239	1	2,899				2,755	7		137	S	I	S	11/10	01/13
Mollie Gulch	6240	1	2,703	440			2,331	304		68	S	I	C H	05/15 05/01	10/31 11/30
Jakes Canyon	6241	1	546					532		14	D	M	C	05/02	05/05
Turner	6242	1	119					119				C	C	05/01	09/31
Free Strip	6301	1	3,889				2,665	1,224			S	I	C	06/01	10/31
Leadore	6302	1	1,086					586	268	232	D	M	C/H	05/16	06/15
Leadville	6303	1	6,795				1,101	4,466		1,228	S	I	C	05/10	08/07
Hawley Creek	6304	2	7,321				439	6,646		236	S	I	C	05/01 10/15	06/30 10/25
Bull Creek	6305	1	1,817				1,086	221		510	S	I	C H	07/16 05/01	09/15 11/30
Tex Creek	6306	2	2,681				1,899	782			S	I	C H	05/10 05/01	07/09 06/30
Powderhorn***	6307	1	28,765			38	16,620	10,235		1,872	U-S	I	C	05/01	10/15
Chamberlain Creek***	6308	2	19,633	1,289		897	15,226	770		2,740	U-S	I	C S	06/01 06/01	09/30 09/25
Center Ridge	6309	2	15,931				15,781	150			U	M	C S	05/24 05/22	10/04 07/13
Spring Canyon	6310	1	23,123	2,040	2,607		21,554	1,569			U-S	I	C S	05/15 05/01	10/15 09/10
Cottonwood***	6311	1	23,658			202	19,252	4,032	48	124	U-S	I	C	05/01	11/30
Smelter Gulch	6312	1	12,101				9,921	1,834		346	U-S	I	C	05/01	12/15
Indianhead	6313	2	11,828	640			9,292	2,536			S	I	C S	05/16 05/16	12/15 12/31
Mammoth/Sawmill	6314	1	16,066				15,207	859			U	I	C	07/25	12/12

*** Part of this allotment is in the Wilderness Study Area.

U = Upward	I = Improve	C = Cattle
S = Static	M = Maintain	H = Horses
D = Downward	C = Custodial	S = Sheep

TABLE B-2 (Concluded)
LEMHI RMP AREA GRAZING ALLOTMENTS AND LIVESTOCK USE

ALLOTMENT NAME	ALLOT. #	NO. OF PERMITTEES	ACRES			BLM ECOLOGICAL CONDITION					APPARENT	MANAGEMENT	KIND OF	SEASON OF USE	
			BLM	STATE	PRIVATE	EXCELLENT	GOOD	FAIR	POOR	UNMAPPED	TREND	STATUS	LIVESTOCK	FROM	TO
Coal Kiln	6315	1	9,087				5,605	3,482			U	I	S S	05/01 09/01	07/15 09/19
Purcell Creek	6316	1	902				198	576	128		S	M	S	05/01	06/30
Nez Perce	6317	1	3,809				3,381	23		405	S	I	C	05/25	11/15

EIGHTEENMILE WILDERNESS STUDY AREA

ALLOTMENT NAME	ALLOT. #	NO. OF PERMITTEES	ACRES			BLM ECOLOGICAL CONDITION					APPARENT	MANAGEMENT	KIND OF	SEASON OF USE	
			BLM	STATE	PRIVATE	EXCELLENT	GOOD	FAIR	POOR	UNMAPPED	TREND	STATUS	LIVESTOCK	FROM	TO
Powderhorn	6307	1	22,631			38	10,551	10,170		1,872	U-S	I	C	05/01	10/15
In Eighteenmile WSA			6,134				6,069	65							
Chamberlain Creek	6308	2	5,185	1,289			4,929	256			U-S	I	C S	06/01 06/01	09/30 09/25
In Eighteenmile WSA			14,448			897	10,297	514		2,740					
Cottonwood	6311	1	19,317			202	15,931	3,013	48	123	U-S	I	C	05/01	11/30
In Eighteenmile WSA			4,340				3,321	1,019							

U = Upward
S = Static
D = Downward

I = Improve
M = Maintain
C = Custodial

C = Cattle
H = Horses
S = Sheep

TABLE B-3
PROPOSED LIVESTOCK GRAZING

Allotment Name	Active Preference AUMs	ALTERNATIVE A							ALTERNATIVE B							ALTERNATIVE C						
		Short-Term AUMs	AP* %	AU** %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved
Tower Cr.	652	300	- 54	0	652	0	+117	0	652	0	+117	717	+ 10	+239	0	300	- 54	0	367	- 44	+ 22	0
Badger Spr.	1,490	1,168	- 22	0	1,490	0	+ 27	0	1,490	0	+ 27	1,818	+ 22	+ 56	0	613	- 59	- 48	767	- 49	- 34	800
Bird Cr.	129	144	+ 12	0	129	0	- 10	0	129	0	- 10	157	+ 22	+ 9	0	115	- 11	- 20	,129	0	- 10	500
Diamond Cr.	30	34	+ 13	0	30	0	- 12	0	30	0	- 12	30	0	- 12	0	21	- 30	- 38	26	- 13	- 24	146
Freeman Cr.	131	136	+ 4	0	136	+ 4	0		131	0	- 4	135	+ 3	- 1	0	131	0	- 4	131	0	- 4	50
S. Carmen Cr.	2,309	2,224	- 4	- 0	2,309	0	+ 4	0	2,309	0	+ 4	2,683	+ 16	+ 21	0	1,003	- 57	- 55	1,254	- 46	- 44	3,950
Deriar Cr.	160	110	- 31	0	160	0	+ 45	0	160	0	+ 45	195	+ 22	+ 77	0	57	- 64	- 48	71	- 56	- 35	400
Fenster Cr.	58	55	- 5	0	58	0	+ 5	0	58	0	+ 5	58	0	+ 5	0	14	- 76	- 75	17	- 71	- 69	68
Kirtley Cr.	257	259	+ 1	0	259	+ 1	0	0	257	0	- 1	257	0	- 1	0	146	- 43	- 44	183	-29	-29	0
Geertson Cr.	938	887	- 5	0	887	- 5	0	0	938	0	+ 6	1,062	+ 13	+ 20	0	784	- 16	- 12	938	0	+ 6	4,600
Bob Moore	154	148	- 4	0	154	0	+ 4	0	154	0	+ 4	188	+ 22	+ 27	0	77	- 50	- 48	98	- 38	- 35	549
Chippe Cr.	42	59	+ 40	0	59	+ 40	0	0	59	+ 40	0	167	+398	+283	0	42	0	- 29	42	0	- 29	0
Bohannon Cr.	842	841	0	0	841	0	0	0	842	0	0	876	+ 4	+ 4	0	417	- 51	- 51	521	- 38	- 38	350
WF Wimpey Cr.	100	120	+ 20	0	120	+ 20	0	0	100	0	- 17	106	+ 6	- 12	0	100	0	- 17	100	0	- 17	0
Coal Mine Gl.	156	42	- 73	0	42	- 73	0	0	156	0	+271	183	+ 17	+336	0	97	- 38	+131	121	- 22	+188	300
Hot Springs	925	1,035	+ 12	0	925	0	- 11	1,000	1,035	+ 12	0	1,263	+ 37	+ 22	0	635	- 31	- 39	794	- 14	- 23	3,900
Perreau Cr.	175	175	0	+ 10	175	0	+ 10	0	175	0	+ 10	213	+ 22	+ 34	0	146	- 17	- 8	175	0	+ 10	900
Joe Moore	280	295	+ 5	0	280	0	- 5	0	280	0	- 5	342	+ 22	+ 16	0	151	- 46	- 49	189	- 33	- 34	1,000
EF Wimpey Cr.	153	117	- 24	0	117	- 24	0	0	153	0	+ 31	167	+ 9	+ 43	0	113	- 26	- 3	141	- 8	+ 21	100
Pratt Cr.	747	428	- 43	0	428	- 43	0	0	747	0	+ 75	868	+ 16	+103	0	288	- 61	- 33	360	- 52	- 16	1,250
Pronghorn	286	183	- 36	0	183	- 36	0	0	286	0	+ 56	342	+ 20	+ 87	0	51	- 82	- 72	64	- 78	- 65	400
County Road	66	66	0	0	66	0	0	0	66	0	0	84	+ 28	+ 28	0	24	- 64	- 64	30	- 55	- 55	200
Baker Cr.	1,090	1,029	- 6	0	1,090	0	+ 6	0	1,090	0	+ 6	1,090	0	+ 6	0	367	- 66	- 64	458	- 58	- 55	1,600
Williams Cr.	378	327	- 13	0	378	0	+ 16	0	378	0	+ 16	461	+ 22	+ 41	0	191	- 49	- 42	239	- 37	- 27	900
Henry Cr.	240	241	0	0	240	0	0	0	240	0	0	293	+ 22	+ 22	0	97	- 60	- 60	122	- 49	- 49	0
Lake Cr.	224	223	0	0	224	0	0	0	224	0	0	273	+ 22	+ 22	0	164	- 27	- 26	205	- 8	- 8	1,400
Ten Mile	30	47	+ 57	0	30	0	- 36	0	146	+487	+311	178	+593	+379	0	30	0	- 36	30	0	- 36	0
Wimpey Cr.	155	305	+ 97	0	305	+ 97	0	0	155	0	- 49	167	+ 8	- 45	0	134	- 14	- 56	155	0	- 49	50
Dummy Cr.	87	52	- 40	0	87	0	+ 67	500	282	+224	+442	344	+295	+562	0	0	-100	-100	0	-100	-100	500
Haynes Cr.	1,366	1,377	+ 1	0	1,377	+ 1	0	0	1,366	0	- 1	1,395	+ 2	+ 1	0	477	- 65	- 65	596	- 56	- 57	300
Lower Basin	783	693	- 12	0	693	- 12	0	0	783	0	+ 13	851	+ 9	+ 23	0	193	- 85	- 72	241	- 69	- 65	600
Baldy Basin	1,940	2,024	+ 4	0	2,024	+ 4	0	53	1,940	0	- 4	2,107	+ 9	+ 4	0	744	- 62	- 63	967	- 50	- 52	1,153
McDevitt Cr.	2,203	1,882	- 15	0	1,882	- 15	0	0	2,203	0	+ 17	2,422	+ 10	+ 29	0	892	- 60	- 53	1,114	- 49	- 41	2,350
Grouse Cr.	2,206	1,963	- 11	0	1,963	- 11	0	0	2,206	0	+ 12	2,519	+ 14	+ 28	0	1,174	- 47	- 40	1,468	- 34	- 25	3,500
Basin Cr.	50	50	0	0	50	0	0	0	50	0	0	50	0	0	0	4	- 92	- 92	6	- 88	- 88	0
McNutt Cr.	88	88	0	0	88	0	0	0	88	0	0	80	0	0	0	43	- 51	- 51	53	- 40	- 40	0
Roostercomb	1,287	1,230	- 4	0	1,287	0	- 5	0	1,230	- 4	0	1,577	+ 23	+ 28	0	466	- 64	- 62	582	- 55	- 53	0
Ltl. Sawmill	1,532	1,153	- 25	0	1,342	- 12	+ 16	0	1,532	0	+ 33	1,738	+ 13	+ 51	0	608	- 60	- 47	760	- 50	- 34	900
Mill Cr.	90	88	- 3	0	90	0	+ 2	0	90	0	+ 2	90	0	+ 2	0	21	- 76	- 76	27	- 69	- 69	0
Walters	524	438	- 16	0	481	- 8	+ 11	0	438	- 16	0	524	0	+ 21	0	114	- 78	- 74	142	- 72	- 67	0
Lee Cr.	518	515	- 1	0	518	0	+ 1	0	518	0	+ 1	647	+ 25	+ 26	0	143	- 72	- 72	179	- 65	- 65	400
Big Spr.	188	167	- 11	0	178	- 6	+ 7	341	188	0	+ 13	236	+ 26	+ 41	0	89	- 53	- 47	111	- 41	- 33	250
Horse Heaven	96	99	+ 3	0	96	0	- 3	0	99	0	+ 3	128	+ 33	+ 29	0	99	+ 3	0	124	+ 29	- 25	400
Everson Cr.	85	68	- 20	0	77	- 10	+ 13	0	85	0	+ 25	89	+ 5	+ 31	0	19	- 78	- 72	24	- 72	- 65	0
Big Eightmile	53	62	+ 19	0	53	0	- 13	0	62	+ 19	0	68	+ 28	+ 10	0	25	- 53	- 60	31	- 38	- 50	0
Nef #1	11	12	+ 9	0	11	0	- 8	0	12	+ 9	0	15	+ 25	+ 25	0	8	- 27	- 33	10	- 9	- 17	0
Nef #2	100	133	+ 33	0	126	+ 26	- 18	0	100	0	- 35	80	- 20	- 48	0	21	- 79	- 86	27	- 73	- 82	0
Dump	30	25	- 17	0	30	0	+ 20	0	30	0	+ 20	33	+ 10	+ 27	0	24	- 20	- 8	30	0	+ 20	0

* AP is Current Active Preference
** AU is the 5-Year Average Use

TABLE B-3 (Continued)
PROPOSED LIVESTOCK GRAZING

		ALTERNATIVE D							ALTERNATIVE E							ALTERNATIVES F & G						
Allotment Name	Active Preference AUMs	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved
Tower Cr.	652	300	- 54	0	652	0	+117	0	441	- 32	+ 47	490	- 25	+ 63	0	441	- 32	+ 47	490	- 25	+ 63	0
Badger Spr.	1,490	1,168	- 22	0	1,490	0	+ 27	0	1,168	- 22	0	1,490	0	+ 27	100	1,168	- 22	0	1,490	0	+ 27	100
Bird Cr.	129	129	0	- 10	129	0	- 10	0	129	0	- 10	144	+ 12	0	100	129	0	- 10	144	+ 12	0	100
Diamond Cr.	30	30	0	- 12	30	0	- 12	0	30	0	- 12	30	0	- 12	0	30	0	- 12	30	0	- 12	0
Freeman Cr.	131	131	0	- 4	131	0	- 4	50	131	0	- 4	131	0	- 4	16	131	0	- 4	131	0	- 4	16
S. Carmen Cr.	2,309	1,563	- 32	- 30	1,954	- 15	- 12	1,850	1,563	- 32	- 30	1,720	- 26	- 23	750	1,563	- 37	- 30	1,720	- 26	- 23	750
Derlar Cr.	160	71	- 56	- 35	85	- 47	- 23	350	85	- 47	- 23	93	- 42	- 15	100	85	- 47	- 23	93	- 42	- 15	100
Fenster Cr.	58	58	0	+ 5	58	0	+ 5	0	58	0	+ 5	58	0	+ 5	0	58	0	+ 5	58	0	+ 5	0
Kirtley Cr.	257	257	0	- 1	257	0	- 1	0	257	0	- 1	257	0	- 1	0	257	0	- 1	257	0	- 1	0
Geertson Cr.	938	938	0	+ 6	938	0	+ 6	1,150	938	0	+ 6	938	0	+ 6	450	938	0	+ 6	938	0	+ 6	430
Bob Moore	154	96	- 38	- 35	115	- 25	- 22	600	115	- 25	- 22	127	- 18	- 14	375	115	- 25	- 22	125	- 18	- 14	375
Chippe Cr.	42	42	0	- 29	42	0	- 29	0	42	0	- 29	42	0	- 29	0	42	0	- 29	42	0	- 29	0
Bohannon Cr.	842	842	0	0	842	0	0	0	842	0	0	842	0	0	0	842	0	0	842	0	0	0
WF Wimpey Cr.	100	100	0	- 17	100	0	- 17	100	100	0	- 17	100	0	- 17	50	75	- 25	- 38	100	0	- 17	100
Coal Mine Gl.	156	156	0	+271	156	0	+271	100	156	0	+271	156	0	+271	100	117	- 25	+179	156	0	+271	150
Hot Springs	925	925	0	- 11	925	0	- 11	1,000	925	0	- 11	1,139	+ 23	+ 10	1,500	635	- 31	- 39	794	- 14	- 23	3,932
Perreau Cr.	175	175	0	+ 10	175	0	+ 10	0	175	0	+ 10	193	+ 10	+ 21	300	146	- 17	- 8	193	+ 10	+ 21	300
Joe Moore	280	280	0	- 5	280	0	- 5	0	280	0	- 5	280	0		0	226	- 19	- 23	231	- 10	- 15	750
EF Wimpey Cr.	133	117	- 24	0	117	- 24	0	100	117	- 24	0	117	- 24	0	100	88	- 44	- 26	117	- 24	0	100
Pratt Cr.	747	353	- 53	- 18	442	- 41	+ 3	500	353	- 53	- 18	389	- 48	- 9	200	353	- 53	- 18	389	- 48	- 9	200
Pronghorn	286	101	- 65	- 45	101	- 65	- 45	0	101	- 65	- 45	101	- 65	- 45	0	101	- 65	- 45	101	- 65	- 45	0
County Road	66	66	0	0	66	0	0	0	66	0	0	66	0	0	0	33	- 50	- 50	33	- 50	- 50	0
Baker Cr.	1,090	1,090	0	+ 6	1,090	0	+ 6	0	1,090	0	+ 6	1,090	0	+ 6	0	550	- 50	- 47	611	- 44	- 41	1,000
Williams Cr.	378	378	0	+ 16	378	0	+ 16	0	378	0	+ 16	378	0	+ 16	200	287	- 24	- 12	319	- 16	- 3	600
Henry Cr.	240	240	0	0	240	0	0	0	240	0	0	240	0	0	0	240	0	0	240	0	0	0
Lake Cr.	224	205	- 8	- 8	224	0	0	900	205	- 8	- 8	224	0	0	500	168	- 25	- 25	168	- 25	- 25	1,000
Ten Mile	30	30	0	- 36	30	0	- 36	0	30	0	- 36	30	0	- 36	0	30	0	- 36	30	0	- 36	0
Wimpey Cr.	155	155	0	- 49	155	0	- 49	150	155	0	- 49	155	0	- 49	50	155	0	- 49	155	0	- 49	50
Dummy Cr.	87	87	0	- 40	87	0	- 40	400	87	0	- 40	87	0	- 40	400	87	0	- 40	87	0	- 40	400
Haynes Cr.	1,366	1,366	0	- 1	1,366	0	- 1	0	1,366	0	- 1	1,366	0	- 1	0	1,366	0	- 1	1,366	0	- 1	0
Lower Basin	783	783	0	+ 13	783	0	+ 13	0	319	- 59	- 54	351	- 55	- 49	100	300	- 36	- 28	693	- 13	0	100
Baldy Basin	1,940	1,217	- 37	- 40	1,522	- 22	- 25	803	1,217	- 37	- 40	1,339	- 31	- 34	353	1,217	- 37	- 40	1,339	- 31	- 34	353
McDevitt Cr.	2,203	1,486	- 33	- 21	1,858	- 16	- 1	1,000	1,486	- 33	- 21	1,635	- 26	- 13	400	1,486	- 33	- 21	1,635	- 26	- 13	400
Grouse Cr.	2,206	1,919	- 13	- 2	2,206	0	+ 12	1,850	1,919	- 13	- 2	2,140	- 3	+ 9	750	1,468	- 33	- 25	1,919	- 13	- 2	750
Basin Cr.	50	50	0	0	50	0	0	0	50	0	0	50	0	0	0	50	0	0	50	0	0	0
McNutt Cr.	88	88	0	0	88	0	0	0	88	0	0	88	0	0	0	88	0	0	88	0	0	0
Roostercomb	1,287	1,230	- 4	0	1,287	0	+ 5	0	784	- 39	- 36	998	- 22	- 19	0	776	- 40	- 37	1,230	- 5	0	
Ltl. Sawmill	1,532	1,057	- 31	- 8	1,210	- 21	+ 5	900	1,553	+ 4	+ 35	1,700	+ 11	+ 47	350	1,021	- 31	- 11	1,152	- 25	0	350
Mill Cr.	90	90	0	+ 2	88	- 3	0		64	- 29	- 28	71	- 21	- 19		38	- 58	- 57	42	- 54	- 52	0
Walters	524	438	- 16	0	524	0	+ 21		378	- 28	- 12	401	- 23	- 7		189	- 64	- 56	208	- 60	- 52	0
Lee Cr.	518	330	- 37	- 36	412	- 21	- 20	400	370	- 29	- 28	478	- 10	- 7	150	239	- 54	- 54	262	- 49	- 49	150
Big Spr.	188	188	0	+ 13	167	- 11	+ 13	230	166	- 12	- 1	177	- 6	+ 6	50	148	- 21	- 11	163	- 13	- 2	0
Horse Heaven	96	99	+ 3	0	96	0	- 3	400	112	+ 16	+ 13	125	+ 30	+ 26	150	96	0	- 3	96	0	- 3	150
Everson Cr.	85	68	- 20	0	85	0	+ 25	0	52	- 39	- 24	57	- 33	- 16	0	26	- 69	- 62	29	- 66	- 57	0
Big Eightmile	53	62	+ 19	0	53	0	- 15	0	68	+ 28	+ 10	75	+ 42	+ 21	0	41	- 23	- 33	45	- 15	- 27	0
Nef #1	11	12	+ 9	0	11	0	- 8	0	12	+ 10	0	12	+ 10	0	0	11	0	- 8	12	+ 9	0	0
Nef #2	100	133	+ 33	0	100	0	- 35	0	100	0	- 35	100	0	- 35	0	36	- 64	- 76	40	- 60	- 74	0
Dump	30	30	0	+ 20	25	- 17	0	0	25	- 17	0	25	- 17	0	0	25	- 17	0	25	- 17	0	0

* AP is Current Active Preference
** AU is the 3-Year Average Use

TABLE B-3 (Continued)
PROPOSED LIVESTOCK GRAZING

		ALTERNATIVE A							ALTERNATIVE B							ALTERNATIVE C						
Allotment Name	Active Preference AUMs	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved
State Section	45	79	+ 76	0	45	0	- 59	0	45	0	- 39	49	+ 10	- 36	0	29	- 36	- 63	36	- 20	- 53	0
Deer Park	40	44	+ 10	0	40	0	- 9	0	44	+ 10	0	44	+ 10	0	0	16	- 60	- 64	20	- 50	- 55	0
Adams Cr.	27	27	0	0	27	0	0	0	27	0	0	30	+ 10	+ 10	0	16	- 41	- 41	20	- 26	- 26	0
Milk Cr.	100	100	0	0	100	0	0	0	100	0	0	130	+ 30	+ 30	0	36	- 44	- 44	70	- 30	- 30	0
Timber Cr.	883	788	- 11	0	836	- 6	+ 6	0	883	0	+ 12	1,084	+ 23	+ 38	0	463	- 48	- 41	581	- 33	- 26	1,200
Leadore Hill	114	109	- 4	- 4	109	- 4	- 4	0	128	+ 13	+ 17	142	+ 25	+ 30	0	180	+ 57	+ 65	226	+ 98	+107	0
Sandy Cr.	483	442	- 9	0	442	- 9	0	0	483	0	+ 9	489	+1.3	+ 11	0	240	- 50	- 46	300	- 38	- 32	110
Kinney Cr.	144	143	- 1	0	143	- 1	0	0	144	0	+ 1	169	+ 17	+ 18	0	58	- 60	- 59	73	- 49	- 49	300
Rattlesnake	266	207	- 22	0	207	- 22	0	0	266	0	+ 29	285	+ 7	+ 38	0	92	- 65	- 56	115	- 57	- 44	200
Warm Spr.	2,250	1,169	- 48	0	1,169	- 48	0	0	2,250	0	+ 92	2,624	+ 17	+124	0	441	- 80	- 62	552	- 75	- 53	2,550
Pattee Cr.	998	771	- 23	0	771	- 23	0	0	998	0	+ 29	1,081	+ 8	+ 40	0	359	- 64	- 53	448	- 55	- 42	550
Gould Basin	971	872	- 10	0	872	- 10	0	31	971	0	+ 11	1,049	+ 8	+ 20	0	481	- 50	- 45	601	- 38	- 31	851
Squaw Cr.	1,510	1,575	+ 4	0	1,575	+ 4	0	0	1,510	0	- 4	1,591	+ 5	+ 1	0	498	- 67	- 68	623	- 59	- 60	800
Pritchard Gl.	416	377	- 9	0	377	- 9	0	0	416	0	+ 10	416	0	+ 10	0	116	- 72	- 69	145	- 65	- 62	0
Big Dry Can.	288	0	-100	0	0	-100	0	0	215	- 25	+100	311	+ 8	+100	0	0	-100	0	0	-100	0	200
Napo Canyon	573	594	+ 4	0	594	+ 4	0	0	573	0	- 4	691	+ 21	+ 16	0	356	- 38	- 40	445	- 22	- 25	1,250
Yearian Cr.	3,494	2,185	- 38	0	2,185	- 38	0	0	3,494	0	+ 60	3,878	+ 11	+ 77	0	1,659	- 53	- 24	2,073	- 43	- 5	2,000
L. Reese Cr.	60	41	- 32	0	41	- 32	0	0	60	0	+ 46	70	+ 15	+ 71	0	77	+ 28	+ 88	96	+ 60	+234	0
Cedar Gl.	190	160	- 16	0	160	- 16	0	0	190	0	+ 19	222	+ 17	+ 39	0	177	- 7	+ 11	221	+ 16	+ 38	350
Ltl.Eightmile	287	136	- 53	0	136	- 53	0	0	287	0	+211	287	0	+211	0	193	- 33	+ 42	241	- 16	+ 77	0
Mollie Gl.	240	219	- 9	0	219	- 9	0	0	240	0	+ 10	249	+ 4	+ 14	0	180	- 25	- 18	225	- 7	+ 3	100
Jakes Canyon	31	31	0	0	31	0	0	0	31	0	0	33	+ 6	+ 6	0	36	+ 16	+ 16	45	+ 45	+ 45	0
Turner	17	13	- 24	0	13	- 24	0	0	17	0	+ 31	24	+ 42	+ 85	0	8	- 53	- 38	10	- 41	- 23	50
Free Strip	728	719	- 1	0	719	- 1	0	0	728	0	+ 1	743	+ 2	+ 3	0	259	- 65	- 64	324	- 55	- 55	650
Leadore	28	18	- 36	0	18	- 36	0	268	28	0	+ 55	35	+ 25	+ 94	0	68	+244	+378	91	+325	+506	368
Leadville	528	531	+ 1	0	531	+ 1	0	0	528	0	- 1	580	+ 10	+ 9	0	453	- 15	- 15	566	+ 7	+ 7	700
Hawley Cr.	625	497	- 21	0	497	- 21	0	0	561	- 9	+ 13	718	+ 15	+ 44	0	488	- 22	- 2	610	- 3	+ 23	1,500
Bull Cr.	235	141	- 40	0	141	- 40	0	0	188	- 20	+ 33	277	+ 18	+ 96	0	121	- 15	- 14	152	- 35	+ 8	100
Tex Cr.	262	262	0	0	262	0	0	0	262	0	0	285	+ 9	+ 9	0	179	- 32	- 32	233	- 15	- 15	250
Powderhorn	5,035	4,995	- 7	0	4,995	- 1	0	0	5,035	0	0	5,640	+ 12	+ 13	0	1,918	- 62	- 62	2,397	- 54	- 52	6,300
Chamberlain	1,456	1,449	+ 3	0	1,499	+ 3	0	0	1,456	0	- 3	1,470	+ 1	- 2	0	1,308	- 13	- 13	1,510	+ 1	+ 1	0
Center Ridge	2,333	938	- 60	0	938	- 60	0	0	1,636	- 30	+ 74	2,333	0	+249	0	1,062	- 55	+ 13	1,328	- 43	+ 42	50
Spring Canyon	3,379	2,729	- 19	0	2,729	- 19	0	0	2,729	- 19	0	3,446	+ 2	+ 26	0	1,541	- 54	- 44	1,927	- 43	- 29	200
Cottonwood	4,298	2,871	- 33	0	2,871	- 33	0	0	4,298	0	+ 50	4,543	+ 6	+ 58	0	1,577	- 63	- 45	1,971	- 54	- 31	2,100
Smelter Gl.	732	752	+ 3	0	752	+ 3	0	0	732	0	- 3	769	+ 5	+ 2	0	807	+ 10	+ 7	1,008	+ 37	+ 34	500
Indianhead	1,308	726	- 44	0	726	- 44	0	0	1,308	0	+ 80	1,399	+ 7	+ 93	0	788	- 40	+ 9	986	- 25	+ 36	650
Mammoth/ Sawmill	2,465	1,370	- 45	0	1,370	- 45	0	0	1,918	- 23	+ 40	2,613	+ 6	+ 91	0	1,071	- 57	- 22	1,338	- 36	- 2	400
Coal Kiln	620	422	- 32	0	422	- 32	0	0	521	- 15	+ 23	698	+ 13	+ 65	0	606	- 2	+ 44	757	+ 22	+ 79	750
Purcell Cr.	28	28	0	0	28	0	0	0	28	0	0	28	0	0	0	60	+ 21	+214	75	+268	+268	0
Nez Perce	977	840	- 14	0	840	- 14	0	0	840	- 14	0	952	- 3	+ 13	0	254	- 74	- 70	317	- 68	- 62	0

PROPOSED LIVESTOCK GRAZING WITHIN EIGHTEENMILE WILDERNESS STUDY AREA

		ALTERNATIVE A							ALTERNATIVE B							ALTERNATIVE C						
Allotment Name	Active Preference AUMs	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved
Powderhorn	1,073	1,065	- 1	0	1,065	- 1	0	0	1,073	0	+ 1	1,202	+ 12	+ 13	0	409	- 62	- 62	511	- 54	- 52	0
Chamberlain	1,108	1,141	+ 3	0	1,141	+ 3	0	0	1,108	0	- 3	1,119	+ 1	- 2	0	996	- 10	- 13	1,149	+ 3	0	0
Cottonwood	788	527	- 33	0	527	- 33	0	0	788	0	+ 50	836	+ 5	+ 59	0	289	- 63	- 45	361	- 54	- 31	650

* AP is Current Active Preference
** AU is the 5-Year Average Use

TABLE B-3 (Concluded)
PROPOSED LIVESTOCK GRAZING

Allotment Name	Active Preference AUMs	ALTERNATIVE D							ALTERNATIVE E							ALTERNATIVES F & G						
		Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved
State Section	45	45	0	- 59	45	0	- 59	0	41	- 9	- 46	43	- 5	- 43	0	40	- 12	- 47	45	0	- 41	0
Deer Park	40	44	+ 10	0	40	0	- 9	0	40	0	- 9	40	0	- 9	0	26	- 35	- 41	25	- 28	- 33	0
Adams Cr.	27	27	0	0	27	0	0	0	39	+ 44	+ 44	43	+ 59	+ 59	0	27	0	0	29	+ 7	+ 7	0
Milk Cr.	100	160	0	0	100	0	0	0	93	- 7	- 7	99	- 1	- 1	0	70	- 30	- 30	100	0	0	0
Timber Cr.	883	544	- 39	- 31	609	- 31	- 23	1,200	772	- 13	- 2	868	- 2	+ 10	500	695	- 21	- 12	765	- 13	- 3	500
Leadore Hill	114	114	0	0	125	+ 10	+ 10	0	114	0	0	125	+ 10	+ 10	0	114	0	0	114	0	0	0
Sandy Cr.	483	483	0	- 9	483	0	- 9	0	398	- 18	- 10	438	- 9	- 1	22	398	- 18	- 10	438	- 9	- 1	22
Kinney Cr.	144	144	0	+ 1	144	0	+ 1	50	144	0	+ 1	144	0	+ 1	50	144	0	+ 1	144	0	+ 1	50
Rattlesnake	266	207	- 22	0	207	- 22	0	0	207	- 22	0	207	- 22	0	0	207	- 22	0	207	- 22	0	0
Warm Spr.	2,250	736	- 67	- 37	920	- 59	- 21	850	736	- 67	- 37	810	- 64	- 31	350	736	- 67	- 37	810	- 64	- 31	350
Pattee Cr.	998	592	- 41	- 23	740	- 26	- 4	350	592	- 41	- 23	652	- 35	- 15	150	592	- 41	- 23	652	- 35	- 15	150
Gould Basin	971	971	0	+ 11	971	0	+ 11	31	971	0	+ 11	971	0	+ 11	31	872	- 10	0	971	0	+ 11	31
Squaw Cr.	1,510	1,510	0	- 4	1,510	0	- 4	0	872	- 42	- 45	960	- 36	- 39	100	872	- 42	- 45	960	- 36	- 39	100
Pritchard Gl.	416	416	0	+ 10	416	0	+ 10	0	416	0	+ 10	416	0	+ 10	0	377	- 9	0	416	0	+ 10	0
Big Dry Can.	288	150	- 48	+100	188	- 35	+100	50	150	- 48	+100	165	- 43	+100	17	139	- 52	+100	139	- 52	+100	100
Napo Canyon	573	573	0	- 4	573	0	- 4	0	573	0	- 4	573	0	- 4	50	356	- 38	- 40	445	- 22	- 25	50
Yearian Cr.	3,494	2,488	- 29	+ 14	2,764	- 21	+ 26	800	2,764	- 21	+ 26	3,040	- 13	+ 39	800	2,300	- 34	+ 5	2,764	- 21	+ 26	800
L. Reese Cr.	60	41	- 32	0	60	0	+ 46	0	41	- 32	0	60	0	+ 46	0	41	- 32	0	60	0	+ 46	0
Cedar Gl.	190	160	- 16	0	190	0	+ 19	150	160	- 16	0	190	0	+ 19	150	160	- 16	0	190	0	+ 19	150
Ltl.Eightmile	287	136	- 53	0	287	0	+211	0	193	- 33	+ 42	287	0	+211	0	193	- 33	+ 42	287	0	+211	0
Mollie Gl.	240	225	- 6	+ 3	240	0	+ 10	50	225	- 6	+ 3	240	0	+ 10	50	225	- 6	+ 3	240	0	+ 10	50
Jakes Canyon	31	31	0	0	31	0	0	0	31	0	0	31	0	0	0	31	0	0	31	0	0	0
Turner	17	17	0	+ 31	17	0	+ 31	0	17	0	+ 31	17	0	+ 31	0	17	0	+ 31	17	0	+ 31	0
Free Strip	728	432	- 41	- 40	475	- 35	- 33	300	432	- 41	- 40	475	- 35	- 33	300	432	- 41	- 40	475	- 35	- 33	300
Leadore	28	18	- 36	0	28	0	+ 56	418	18	- 36	0	28	0	+ 56	418	18	- 36	0	28	0	+ 56	418
Leadville	528	453	- 14	- 15	566	+ 7	+ 7	1,100	453	- 14	- 15	566	+ 7	+ 7	1,100	453	- 14	- 15	566	+ 7	+ 7	1,100
Hawley Cr.	625	488	- 22	- 2	610	- 2	+ 23	1,700	488	- 22	- 2	610	- 2	+ 23	1,000	488	- 22	- 2	610	- 2	+ 23	1,000
Bull Cr.	235	141	- 40	0	235	0	+ 66	50	141	- 40	0	235	0	+ 66	100	141	- 40	0	235	-	+ 66	100
Tex Cr.	264	249	- 5	- 5	262	0	0	200	249	- 5	- 5	262	0	0	100	249	- 5	- 5	262	0	0	100
Powderhorn	5,035	5,192	+ 3	+ 3	5,438	+ 8	+ 8	2,550	4,425	- 13	- 12	4,794	- 5	- 5	1,000	3,196	- 37	- 36	3,517	- 31	- 30	1,000
Chamberlain	1,456	1,514	+ 4	+ 1	1,572	+ 8	+ 5	0	1,514	+ 4	+ 1	1,948	+ 8	+ 5	0	1,456	0	- 3	1,456	0	- 3	0
Center Ridge	2,333	1,753	- 25	+ 89	2,333	0	+249	50	1,753	- 25	+ 89	2,333	0	+249	50	1,770	- 24	+ 88	1,947	- 17	+208	50
Spring Canyon	3,379	2,729	- 19	0	2,77[illegible]	- 18	+ 2	200	2,569	- 24	- 6	2,826	- 16	+ 4	500	2,569	- 24	- 6	2,826	- 16	+ 4	500
Cottonwood	4,298	4,427	+ 3	+ 54	4,513	+ 5	+ 57	1,000	3,154	- 27	+ 10	3,379	- 21	+ 18	450	2,628	- 39	- 8	5,519	- 33	+ 1	300
Smelter Gl.	732	732	0	- 3	752	+ 3	0	400	732	0	- 3	752	+ 3	0	400	732	0	- 3	752	+ 3	0	400
Indianhead	1,308	986	- 25	+ 36	1,308	0	+ 80	600	986	- 25	+ 36	1,308	- 25	+ 80	500	986	- 25	+ 36	1,308	0	+ 80	500
Mammoth/ Sawmill	2,463	2,539	+ 3	+ 85	2,388	+ 3	+ 89	200	1,765	- 28	+ 29	1,983	- 20	+ 45	300	1,370	- 45	0	1,785	- 28	+ 30	300
Coal Kiln	620	651	+ 5	+ 54	682	+ 1	+ 62	900	558	- 10	+ 32	527	- 15	+ 25	900	622	- 32	0	606	- 2	+ 44	900
Purcell Cr.	28	30	+ 7	+ 7	32	+ 14	+ 14	150	30	+ 14	+ 7	32	+ 14	+ 14	0	28	0	0	28	0	0	0
Nez Perce	977	1,016	+ 4	+ 21	1,055	+ 8	+ 26	0	635	- 35	- 24	693	- 29	- 18	0	423	- 57	- 50	466	- 48	- 44	0

PROPOSED LIVESTOCK GRAZING WITHIN
EIGHTEENMILE WILDERNESS STUDY AREA

Allotment Name	Active Preference AUMs	ALTERNATIVE D							ALTERNATIVE E							ALTERNATIVES F & G						
		Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved	Short-Term AUMs	AP %	AU %	Long-Term AUMs	AP %	AU %	Acres Improved
Powderhorn	1,073	1,106	+ 3	+ 4	1,159	+ 8	+ 9	0	943	- 13	- 11	1,022	- 5	- 4	0	681	- 37	- 36	750	- 30	- 30	0
Chamberlain	1,108	1,152	+ 4	+ 1	1,196	+ 8	+ 5	0	1,152	+ 4	+ 1	1,572	+ 8	+ 38	0	1,108	0	- 3	1,108	0	- 3	0
Cottonwood	788	812	+ 3	+ 54	827	+ 5	+ 57	250	578	- 27	+ 10	619	- 21	+ 17	150	482	- 39	- 9	530	- 33	+ 1	0

* AP is Current Active Preference
** AU is the 5-Year Average Use

TABLE B-4
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Tower Creek	6101	Noxious weed is spreading	Control spread of noxious weed	Implement weed control program
		Present preference and stocking rates is 6.7 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/ or upgrade existing developments
Badger Springs	6102	Noxious weed is spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination with all permittees	Establish an AMP	Develop a grazing system and formalize AMP
		Present preference and stocking rates is 6.2 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/ or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Badger Springs Gulch	Rest riparian areas; provide for livestock water away from creek via range improvements
Bird Creek	6103	Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Bird Creek	Rest riparian areas; provide for livestock water away from creek via range improvements
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/ or upgrade existing developments
		Small allotment with same users as Deriar Creek	Combine into a more manageable unit	Combine with Bob Moore and Deriar Creek allotments and develop AMP

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Freeman Creek	6105	Noxious weed is spreading	Control spread of noxious weed	Implement weed control program
		Present management is being changed by permittee	Establish an AMP	Develop a grazing system and formalize AMP; develop needed range improvements
		Present active preference and stocking rate is 14.6 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
So. Carmen Creek	6106	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Present management needs refinement to meet management objectives	Establish an AMP	Develop a grazing system and formalize AMP
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Beer Can Flats	Rest riparian areas; provide for livestock water away from creek via range improvements
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use by all user groups in areas of identified as highly erosive
		Present active preference and stocking rate is 6.5 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor and to attain satisfactory condition	Maintain key forage plant vigor and improve condition of allotment	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
		Existing AMP does not reflect current operation and is not meeting management objectives	Set up AMP to reflect current operation and management objectives	Formally revise AMP changing season of use and use levels

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Deriar Creek	6107	Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Present preference and stocking rates is 5.3 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Small allotment with same users as Bob Moore and Bird Creeks	Combine into a more manageable unit	Combine with Bob Moore and Bird Cr. allotments and develop AMP
Geertson Creek	6110	Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Present management needs refinement	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Vigor of key forage species is low and range condition is unsatisfactory	Improve range condition and vigor of key forage species	Adjust turn-out date; adjust livestock numbers and/or revise AMP
		Present active preference and stocking rate is 12.5 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Geertson Creek (Cont'd)		Existing AMP does not reflect current operation and is not meeting management objectives	Set up AMP to reflect current operation and management objectives	Formally revise AMP changing season of use and use levels
Bob Moore	6111	Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Present preference and stocking rates is 7.4 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Small allotment	Combine into a more manageable unit	Combine with Bird and Deriar creek allotments and develop AMP
WF Wimpey Creek	6114	Certain areas are in unsatisfactory condition due to confinement of small allotment size	Combine into a more manageable unit	Combine with Coal Mine Gulch allotment and develop AMP
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after
		Present management needs coordination with BLM	Establish an AMP	Develop a grazing system and formalize AMP that combines this allotment with Coal Mine Gulch
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present active preference and stocking rate is 27.5 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas identified as highly erosive

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
WF Wimpey Creek (Cont'd)		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
Coal Mine Gulch	6115	Certain areas are in unsatisfactory condition due to confinement of small allotment size	Combine into a more manageable unit	Combine with WF of Wimpey Creek allotment and develop AMP
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after
		Present management needs coordination with BLM	Establish an AMP	Develop a grazing system and formalize AMP that combines this allotment with WF Wimpey Creek
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present active preference and stocking rate is 9.3 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Hot Springs	6116	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Sevenmile Creek, Hot Springs Creek, Eli Creek (Hyde Creek)	Rest riparian areas; provide for livestock water away from creek via range improvements
		Existing AMP does not reflect current operation and is not meeting management objectives	Set up AMP to reflect current operation and management objectives	Formally revise AMP changing season of use and use levels
Perreau Creek	6117	Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Perreau Creek	Rest riparian areas; provide for livestock water away from creek via range improvements

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Joe Moore	6116	Present management needs coordination	Establish an AMP	Develop a grazing system and formalize AMP
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 8.1 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Mulkey Creek	Rest riparian areas; provide for livestock water away from creek via range improvements
Pratt Creek	6120	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Boundary is unfenced	Formally establish and document boundary	Permittee meeting and fence
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; construct additional fences; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination between permittee & BLM	Establish an AMP	Develop a grazing system and formalize AMP
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Pratt Creek (Cont'd)		Present active preference and stocking rate is 5.8 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
Baker Creek	6123	Present management needs coordination	Establish an AMP	Develop a grazing system and formalize AMP
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Present preference and stocking rates is 5.0 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Baker Creek, Withington Creek	Rest riparian areas; provide for livestock water away from creek via range improvements
Williams Creek	6124	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Present preference and stocking rates is 7.6 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Henry Creek, Williams Creek	Rest riparian areas; provide for livestock water away from creek via range improvements

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Lake Creek	6126	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Henry Creek, Lake Creek	Rence riparian areas; provide for livestock water away from creek via range improvements
		Present management unsatisfactory	Improve grazing management	Design proper grazing system
Wimpey Creek	6128	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Present management needs coordination and refinement	Establish an AMP	Develop a grazing system and formalize AMP
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present active preference and stocking rate for cow/calf pairs is 12.9 acres/AUM; however, permittee has been allowed, on a temporary basis, a yearling stocking rate of 6.6 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Wimpey Creek (Cont'd)		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Wimpey Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
Dummy Creek	6129	Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Currently unalloted	Use to provide rest to other allotments	Graze 2 out of 3 years to provide rest to other allotments
Lower Basin	6202	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Present preference and stocking rates is 3.7 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Baldy Basin	6203	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination and refinement	Establish an AMP	Develop a grazing system and formalize AMP
		Poisonous plants causing death loss	Control livestock use on poisonous plants	Delay grazing until range readiness; implement weed control program
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Continue to defer grazing use on all or part of allotment
		Present preference and stocking rates is 5.9 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along McDevitt Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
McDevitt Creek	6204	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization is reached

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
McDevitt Creek (Cont'd)		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along McDevitt Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination and refinement	Establish an AMP	Develop a grazing system and formalize AMP
		Poisonous plants causing death loss	Control livestock use on poisonous plants	Delay grazing until range readiness; implement weed control program
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 6.1 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
Grouse Creek	6205	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs organization and coordination between users and with BLM	Establish an AMP	Develop a grazing system and formalize AMP
		Poisonous plants causing death loss	Control livestock use on poisonous plants	Delay grazing until range readiness; implement weed control program

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Grouse Creek (Cont'd)		Vigor of key forage species is low in some areas	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 7.9 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Grouse Creek, Trail Creek, and Bull Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Key forage species are lacking in some areas	Increase forage production	Interseed or plow and seed areas lacking key forage species
Roostercomb	6208	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present preference and stocking rates is 3.7 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Little [illegible]	#209	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present management needs coordination between BLM and Forest Service	Formalize an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Poisonous plants causing death loss	Control livestock use on poisonous plants	Delay grazing until range readiness; implement weed control program
		Present preference and stocking rates in [illegible] imbalance	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
[illegible]	[illegible]	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present preference and stocking rates in [illegible] imbalance	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Walters (Cont'd)		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels
Bee Creek	6212	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on spring/summer range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 4.1 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Walters Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Horse Heaven	6214	Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present preference and stocking rates is 15.4 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels
Milk Creek	6223	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on spring/summer range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present preference and stocking rates is 6.9 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Milk Creek (Cont'd)		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels
Timber Creek	6224	Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Present preference and stocking rates is 9.2 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Little Timber Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species

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TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Leadore Hill	6225	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distributiou is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present preference and stocking rates is 11.8 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Big Timber Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels
Warm Springs	6229	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock distribution needs some improvement	Improve livestock distribution	Develop additional water sources and range improvements
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Warm Springs (Cont'd)		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Present preference and stocking rates is 2.9 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Warm Springs Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Key forage species are lacking in some areas	Increase forage production	Interseed or plow and seed areas lacking key forage species
Pattee Creek	6230	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization
		Present management needs coordination and organization with BLM	Establish an AMP	Develop a grazing system and formalize AMP
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Pattee Creek (Cont'd)		Present preference and stocking rates is 5.4 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Pattee Creek	Fence riparian areas; provide for livestock water away from creek via range improvements
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
Squaw Creek	6232	Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Boundary is unfenced in one area causing trespass and management problems	Formally establish and document boundary	Fence this area
		Livestock distribution needs some improvement	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization is reached
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination with BLM	Establish an AMP	Develop a grazing system and formalize AMP
		Present preference and stocking rates is 4.9 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Cow Creek	Fence riparian areas; provide for livestock water away from creek via range improvements

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Pritchard Gulch	6233	Livestock distribution is unsatisfactory and vigor of key forage species is low in areas of high utilization	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Present management needs coordination between permittees and BLM	Establish AMP	Develop a grazing system and formalize an AMP
		Present active preference and stocking rate is 4.2 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water aavailability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Current spring turnout dates are often to early to maintain key forage plant vigor	Maintain key forage	Adjust livestock turnout dates to maintain plant vigor
		Small, steep, restricted allotment	Combine with another allotment to create a more manageable unit	Combine with an adjacent allotment and develop AMP
Big Dry Canyon	6234	Allotment open with no designation of AUMs or permittees	Determine disposition of allotment	Designate a primary benefitting use and determine if livestock grazing will be allowed; if grazing is allowed, determine AUM levels, season of use, operators, and allotment management plan
		Small, steep allotment with significant riparian areas in bottom and significant wildlife use; past stocking rate was 7.2 acres/AUM	If livestock use is allowed, determine proper stocking rate and useable areas	If livestock use is allowed, manage for present and future wildlife use, manage for protection of riparian areas, set acceptable utilization levels, require salting in specific areas, require proper livestock distribution, require accurate actual use data, require an organized grazing system and allotment management plan

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Napo Canyon	6235	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization is reached
		Present management needs coordination with BLM	Establish an AMP	Develop a grazing system and formalize AMP
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 9.3 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Small restricted allotment	Combine with another allotment to create a more manageable unit	Combine with an adjacent allotment and develop AMP
Yearian Creek	6236	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		North boundary is unfenced	Formally establish and document boundary	Permittee meeting and fence

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Yearian Creek (Cont'd)		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Poisonous plants causing death loss	Control livestock use on poisonous plants	Delay grazing until range readiness; implement weed control program
		Present preference and stocking rates is 7.3 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Creek bottoms	Fence riparian areas; provide for livestock water away from creek via range improvements
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP
Cedar Gulch	6238	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Cedar Gulch (Cont'd)		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along	Fence riparian areas; provide for livestock water away from creek via range improvements
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
Little Eightmile	6239	Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Boundary is unfenced	Formally establish and document boundary	Permittee meeting and fence
		Present preference and stocking rates is 11.2 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Needs grazing system;	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels
Mollie Gulch	6240	Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present management needs coordination with BLM	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Mollie Gulch (Cont'd)		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 10.5 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels
Free Strip	6301	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on summer range and calving ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present management needs improved coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Present preference and stocking rates is 5.3 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Leadville	6303	Livestock/big game forage conflict on spring range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 12.8 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
Hawley Creek	6304	Livestock/big game forage conflict on spring range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Hawley Creek (Cont'd)		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 11.7 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
Tex Creek	6306	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on summer range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program;
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 10.2 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Powderhorn	6307	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 5.7 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP
		Allotment has same users as Bull Creek	Combine into a more manageable unit	Combine with Bull Creek allotment and develop AMP
Bull Creek	6305	Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Noxious weed spreading	Control spread of noxious weed	Implement weed control program
		Present preference and stocking rates is 7.7 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Small allotment with same user as Powderhorn	Combine into a more manageable unit	Combine with Powderhorn allotment and develop AMP

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Chamberlain Creek	**6308**	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on spring/summer range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Poisonous plants causing death loss	Control livestock use on poisonous plants	Delay grazing until range readiness; implement weed control program
		Present preference and stocking rates is 13.5 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Riparian areas are in unsatisfactory condition	Improve condition of riparian areas along Eighteenmile Creek	Rest riparian areas; provide for livestock water away from creek via range improvements
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Spring Canyon	6310	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on spring/summer range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		East boundary is unfenced	Formally establish and document boundary	Permittee meeting and fence
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Poisonous plants causing death loss	Control livestock use on poisonous plants	Delay grazing until range readiness; implement weed control program
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 6.8 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Cottonwood	6311	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on fall breeding range & calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		West boundary is unfenced	Formally establish and document boundary	Permittee meeting and fence
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 5.5 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Smelter Gulch	6312	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Highly erodable soils	Manage areas of highly erodable soils to prevent accelerated erosion	Establish acceptable levels of utilization and use in areas of identified as highly erosive
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Allotment has same users as Coal Kiln	Combine into a more manageable unit	Combine with Coal Kiln allotment and develop AMP
Indian Head	6313	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Boundary is unfenced	Formally establish and document boundary	Permittee meeting and fence

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Indian Head (Cont'd)		Present management needs coordination between BLM and Forest Service	Establish an AMP	Develop a grazing system and formalize AMP that is combined and coordinated with the Forest Service
		Present preference and stocking rates is 9.0 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Key forage species are lacking	Increase forage production	Interseed or plow and seed areas lacking key forage species
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program; require cattle movement after an acceptable level of utilization has been reached
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
Mammoth/Sawmill	6314	Livestock/big game forage conflict on spring/summer range & calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife
		Present preference and stocking rates is 6.5 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally revise AMP changing season of use and use levels

TABLE B-4 (Continued)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Coal Kiln	6315	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on spring/summer range & calving/fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		East boundary is unfenced	Formally establish and document boundary	Permittee meeting and fence
		Livestock distribution is unsatisfactory	Improve livestock distribution	Develop additional water sources; change salting program
		Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Spring turn-out too early to maintain key forage plant vigor	Maintain key forage plant vigor	Adjust livestock turn-out dates to maintain plant vigor
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally develop AMP changing season of use and use levels
		Small allotment with same users as Smelter Gulch	Combine into a more manageable unit	Combine with Smelter Gulch allotment and develop AMP
Nez Perce	6317	Certain areas are in unsatisfactory condition due to sagebrush density	Reduce sagebrush density	Implement brush control program
		Livestock/big game forage conflict on winter range and fawning ground	Reduce livestock/big game conflicts for ranges	Establish proper season and use area
		Fences restrict wildlife movement	Make fences compatible with wildlife needs	Modify portions of fences to a type compatible with wildlife

TABLE B-4 (Concluded)
"I" CATEGORY ALLOTMENTS PROBLEMS/CONFLICTS

ALLOT. NAME	#	PROBLEMS/ CONFLICTS	OBJECTIVES	MANAGEMENT ALTERNATIVES
Nez Perce (Cont'd)	6317	Vigor of key forage species is low	Improve condition and vigor of key forage species	Defer grazing use on all or part of allotment
		Present preference and stocking rates is 3.9 acres/AUM	Determine proper stocking rate and useable areas	Map utilization areas; monitor actual use
		Water availability limits distribution	Increase livestock distribution	Develop additional water sources and/or upgrade existing developments
		Needs grazing system	Set up AMP to reflect current operation and management objectives	Formally revise AMP changing season of use and use levels

APPENDIX C

BIG GAME FORAGE DEMAND

APPENDIX C

BIG GAME FORAGE DEMAND

The difficulty of accurately assessing forage demand by big game species is well recognized. Although the following figures are supported by pertinent literature, some controversy still exists as to what the precise figures should be. The forage intake rate per hundredweight of body weight elicits the most discussion. Since ruminants are bulk limited, a maximum intake rate is probable. At the other end, some minimal intake must occur to assure survival. Between the high and low, considerable variation occurs, depending on the sex and age of the animal, food habitats, forage available, nutrient density of forage, behavior, physiological condition of the animal, season, and other factors.

Big Game Species	Season	Est. lbs/cwt/day	Est. x animal wt.	Est. % Diet Overlap w/cattle	No./Cattle AUM (800 lbs. Forage Unit)
Antelope	Yearlong	1.85	98# (adult)	25	59.2
Deer	Winter	3.1	130#	25	25.2
Deer	Spring	3.1	130#	50	12.6
Elk	Winter/Spring	2.2	375#	50	6.2
Bighorn	Winter/Spring	3.17	124#	100	6.8

Cattle equivalent AUM conversion formula:

$$\frac{xwt}{100} = cwt$$

cwt x lbs./cwt/day x 30 days = lbs. air-dry forage/month

lbs. air-dry forage/month x no. of animals x no. of months = total forage demand (TFD)

TFD x diet overlap = lbs. of cattle forage

$$\frac{\text{lbs. of cattle forage}}{800} = \text{cattle equivalent AUMs}$$

Table C-1 illustrates the big game forage demand for each alternative.

TABLE C-1

BIG GAME FORAGE DEMAND BY ALLOTMENT
(AUMs in Cattle Equivalent)

ALLOTMENT	SPECIES	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E	ALTERNATIVES F&G
Tower Creek	Deer	74	48	104	58	83	100
	Elk	24	11	35	10	14	27
	Antelope	2	2	2	1	2	2
		100	61	141	69	99	129
Badger Springs	Deer	123	80	172	97	139	167
	Elk	36	16	52	16	21	40
	Antelope	6	5	6	4	5	6
		165	101	230	117	165	213
Bird Creek	Deer	30	19	42	24	34	41
Diamond Creek	Deer	7	5	10	6	8	10
Freeman Creek	Deer	7	5	10	6	8	9
	Elk	62	28	89	27	37	69
		69	33	99	33	45	78
South Carmen Creek	Deer	125	81	175	99	141	170
	Elk	24	11	35	10	14	27
	Antelope	9	7	10	6	8	10
		158	99	225	115	163	207
Deriar Creek	Deer	13	8	18	10	15	17
Fenster Creek	Deer	1	-	1	1	1	2
Kirtley Creek	Deer	4	3	6	3	5	6
	Antelope	3	2	3	2	3	3
		7	5	9	5	8	9
Geertson Creek	Deer	35	23	49	28	35	48
	Elk	12	5	17	5	7	13
	Antelope	9	7	9	6	8	9
		56	35	75	39	50	70
Bob Moore	Deer	13	8	18	10	15	18
Chipps Creek	Deer	36	23	50	28	41	49
Bohannon Creek	Deer	28	18	39	22	31	38
	Elk	38	17	55	16	23	42
	Antelope	3	2	3	2	3	3
		69	37	97	40	57	83
WF Whimpey Creek	Deer	61	40	85	48	69	82
	Elk	19	9	27	8	11	21
	Antelope	4	3	4	3	4	4
		84	52	116	59	84	107
Coal Mine Gulch	Deer	43	28	60	34	49	58
	Antelope	4	3	4	3	4	4
		47	31	64	37	53	62
Hot Springs	Deer	119	77	167	94	134	161
	Antelope	15	12	16	10	14	16
		134	89	183	104	148	177
Perreau Creek	Deer	27	18	38	21	30	36
Joe Moore	Deer	14	9	20	11	16	19
	Elk	14	6	20	6	8	16
	Antelope	5	4	5	3	5	5
		33	19	45	20	29	40
EF Whimpey Creek	Deer	23	15	32	18	26	31
	Elk	9	4	13	4	5	10
	Antelope	2	2	2	1	2	2
		34	21	47	23	33	43
Pratt Creek	Deer	74	48	104	58	84	100
	Elk	27	12	39	12	16	30
	Antelope	2	2	2	1	2	2
		103	62	145	71	102	132

TABLE C-1 (Continued)

BIG GAME FORAGE DEMAND BY ALLOTMENT
(AUMs in Cattle Equivalent)

ALLOTMENT	SPECIES	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E	ALTERNATIVES F&G
Pronghorn	Deer	14	9	20	11	16	19
	Elk	15	7	22	7	9	17
	Antelope	-	-	T	T	T	T
		29	16	42	18	25	36
County Road	Deer	15	10	21	12	17	20
	Antelope	-	-	T	T	T	T
Baker Creek	Deer	51	33	71	40	58	69
	Elk	39	17	56	17	23	43
	Antelope	9	7	10	6	8	10
		99	57	137	63	89	122
Williams Creek	Deer	37	24	52	29	42	50
	Elk	28	13	40	12	17	31
		65	37	92	41	59	81
Henry Creek	Deer	17	11	24	13	19	23
	Elk	41	18	59	18	25	46
		58	29	83	31	44	69
Lake Creek	Deer	69	45	97	54	78	93
	Elk	7	3	10	3	4	8
		76	48	107	57	82	101
Tenmile	Deer	24	16	34	19	27	33
	Antelope	2	2	2	1	2	2
		26	18	36	20	29	35
Whimpey Creek	Deer	6	4	8	5	7	8
	Elk	9	4	13	4	5	10
	Antelope	3	2	3	2	3	3
		18	10	24	11	15	21
Haynes Creek	Deer	35	23	49	28	40	47
	Elk	39	17	56	17	23	43
	Antelope	9	7	10	6	8	10
		83	47	115	51	71	100
Dummy Creek	Antelope	2	2	2	1	2	2
Lower Basin	Deer	27	18	38	21	30	37
	Elk	48	22	69	21	29	53
	Antelope	5	4	5	3	5	5
		80	44	112	45	64	95
Baldy Basin	Deer	70	45	98	55	79	95
	Elk	200	90	288	87	120	222
	Antelope	9	7	10	6	8	10
		279	142	396	148	207	327
McDevitt Creek	Deer	117	76	164	92	132	158
	Elk	118	53	170	52	71	131
	Antelope	8	7	8	5	7	8
		243	136	342	149	210	297
Grouse Creek	Deer	101	66	142	80	114	137
	Elk	33	15	47	14	20	37
	Antelope	8	7	8	5	7	8
		142	88	197	99	141	182
Rooster Comb	Deer	39	25	55	31	44	53
	Elk	85	38	122	37	51	94
	Antelope	4	3	4	3	4	4
		128	66	181	71	99	151
Little Sawmill	Deer	24	16	34	19	27	33
	Elk	57	26	82	25	34	63
	Antelope	19	16	20	19	17	20
		200	58	136	63	78	116
Mill Creek	Antelope	3	2	3	2	3	3

T = Trace

TABLE C-1 (Continued)

BIG GAME FORAGE DEMAND BY ALLOTMENT
(AUMs in Cattle Equivalent)

ALLOTMENT	SPECIES	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E	ALTERNATIVES F&G
Walters	Antelope	3	2	3	2	3	3
Big Springs	Antelope	2	1	2	1	2	2
Horse Heaven	Antelope	6	5	6	4	5	6
Everson Creek	Antelope	T	T	T	T	T	T
Big Eightmile	Antelope	T	T	T	T	T	T
Nef #1	Antelope	T	T	T	T	T	T
Nef #2	Antelope	1	1	1	1	1	1
Dump	Deer Antelope	7 1 8	5 1 6	9 1 10	6 1 7	8 1 9	10 1 11
State Section	Antelope	2	2	2	1	2	2
Deer Park	Antelope	T	T	T	T	T	T
Adams Creek	Antelope	1	1	1	1	1	1
Milk Creek	Antelope	T	T	T	T	T	T
Timber Creek	Deer Antelope	56 9 65	36 7 43	78 10 88	44 6 50	63 8 71	76 10 86
Leadore Hill	Deer Antelope	11 1 12	7 1 8	15 1 16	9 1 10	12 1 13	15 1 16
Sandy Creek	Deer Elk Antelope	60 34 2 96	39 15 2 56	84 49 2 135	47 15 1 63	68 20 2 90	81 38 2 121
Kinney Creek	Deer Elk Antelope	13 14 2 29	8 6 2 16	18 20 2 40	10 6 1 17	14 8 2 24	18 16 2 36
Rattlesnake	Deer Elk Antelope	19 30 2 51	12 13 2 27	27 43 2 72	15 13 1 29	21 18 2 41	26 33 2 61
Warm Springs	Deer Elk Antelope	90 40 14 144	58 18 11 87	126 58 15 199	71 17 9 97	102 24 13 139	122 44 15 181
Pattee Creek	Deer Elk Antelope	74 69 9 152	48 31 7 86	104 99 10 213	58 30 6 94	84 41 9 134	100 77 10 187
Gould Basin	Deer Elk Antelope	76 31 5 112	49 14 4 67	107 45 5 157	60 14 3 77	86 19 5 110	103 35 5 143
Squaw Creek	Elk Antelope	69 T 69	31 T 31	100 T 100	30 T 30	41 T 41	77 T 77

T = Trace

TABLE C-1 (Continued)

BIG GAME FORAGE DEMAND BY ALLOTMENT
(AUMs in Cattle Equivalent)

ALLOTMENT	SPECIES	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E	ALTERNATIVES F&G
Pritchard Gulch	Deer	6	4	8	5	7	8
	Elk	14	6	20	6	8	16
	Antelope	2	2	2	2	2	2
		22	12	30	13	17	26
Dry Canyon	Deer	11	7	15	9	12	15
	Elk	24	11	35	10	14	27
	Antelope	2	2	2	1	2	2
		37	20	52	20	28	44
Napo Canyon	Deer	26	17	36	21	29	35
	Elk	53	24	76	23	32	59
	Antelope	2	2	2	1	2	2
		81	43	114	45	63	96
Yearian Creek	Deer	219	142	307	173	247	296
	Elk	114	53	164	50	68	127
	Antelope	15	12	16	10	14	16
		348	207	487	233	329	439
Lower Reese	Antelope	2	2	2	1	2	2
Cedar Gulch	Deer	25	16	35	20	28	34
	Elk	10	5	14	4	6	11
	Antelope	2	2	2	1	2	2
		37	23	51	25	36	47
Little Eightmile	Deer	40	26	56	32	45	54
	Antelope	2	2	2	1	2	2
		42	28	58	33	47	56
Mollie Gulch	Deer	29	19	41	23	33	40
	Antelope	2	2	2	1	2	2
		31	21	43	24	35	42
Jakes Canyon	Deer	4	2	6	3	5	6
	Antelope	T	T	T	T	T	T
		4	2	6	3	5	6
Leadore	Deer	8	11	13	10	6	14
	Antelope	1	1	1	1	1	1
		9	12	14	11	7	15
Leadville	Deer	78	50	109	61	88	105
	Antelope	2	2	2	1	2	2
	Bighorn	-	-	35	-	20	25
		80	52	146	62	110	132
Hawley Creek	Deer	39	25	55	31	44	53
	Elk	58	26	84	25	35	65
	Antelope	3	2	3	2	3	3
	Bighorn	-	-	45	-	20	30
		100	53	187	58	102	151
Bull Creek	Deer	49	32	69	39	55	66
	Elk	117	53	169	51	70	130
	Antelope	1	1	1	1	1	1
	Bighorn	-	-	15	-	10	10
		167	86	254	91	136	207
Tex Creek	Antelope	2	2	2	1	2	2
Powderhorn	Deer	179	116	251	141	202	243
	Elk	323	146	466	141	193	359
	Antelope	23	19	24	15	21	24
	Bighorn	-	-	55	-	30	40
		525	281	796	297	446	666
Chamberlain Creek	Deer	51	33	71	40	58	69
	Elk	129	58	186	56	77	143
	Antelope	9	7	10	6	8	10
	Bighorn	-	-	95	-	-	17
		189	98	362	102	143	239

T = Trace

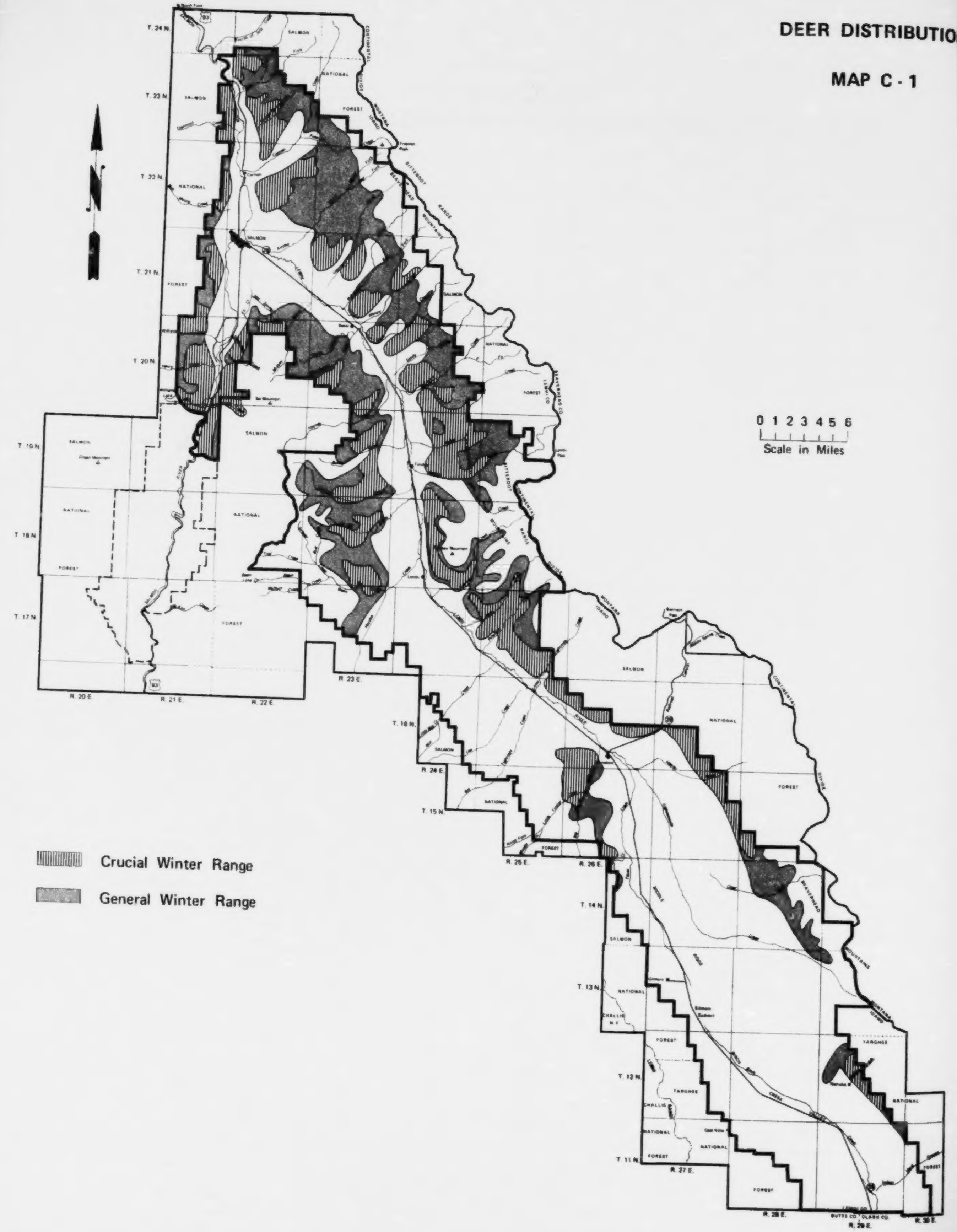
TABLE C-1 (Concluded)

BIG GAME FORAGE DEMAND BY ALLOTMENT
(AUMs in Cattle Equivalent)

ALLOTMENT	SPECIES	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D	ALTERNATIVE E	ALTERNATIVES F&G
Center Ridge	Antelope	13	11	14	9	12	14
Spring Canyon	Antelope	28	23	29	19	25	29
Cottonwood	Elk	31	14	45	14	19	35
	Antelope	30	25	32	20	27	32
		61	39	77	34	46	67
Smelter Gulch	Deer	31	20	43	24	35	42
	Antelope	16	13	17	11	15	17
		47	33	60	35	50	59
Indian Head	Deer	16	10	22	13	18	22
	Antelope	16	13	17	11	15	17
		32	23	39	24	33	39
Mammoth/Sawmill	Antelope	23	19	24	15	21	24
Coal Kiln	Antelope	13	11	14	9	11	14
Purcell Creek	Deer	12	8	17	9	14	16
	Antelope	2	2	2	1	2	2
		14	10	19	10	16	18
Nez Perce	Antelope	26	21	27	17	24	27

DEER DISTRIBUTIO

MAP C - 1


Crucial Winter Range
General Winter Range
0 1 2 3 4 5 6
Scale in Miles
N
SALMON
NATIONAL
FOREST
CONTINENTAL
DIVIDE
MONTANA
IDAHO
BITTERROOT
MOUNTAINS
RANGE
BEAVERHEAD
LEMHI CO.
BEAVERHEAD CO.
TARGHEE
CHALLIS
RIVER
T. 24 N.
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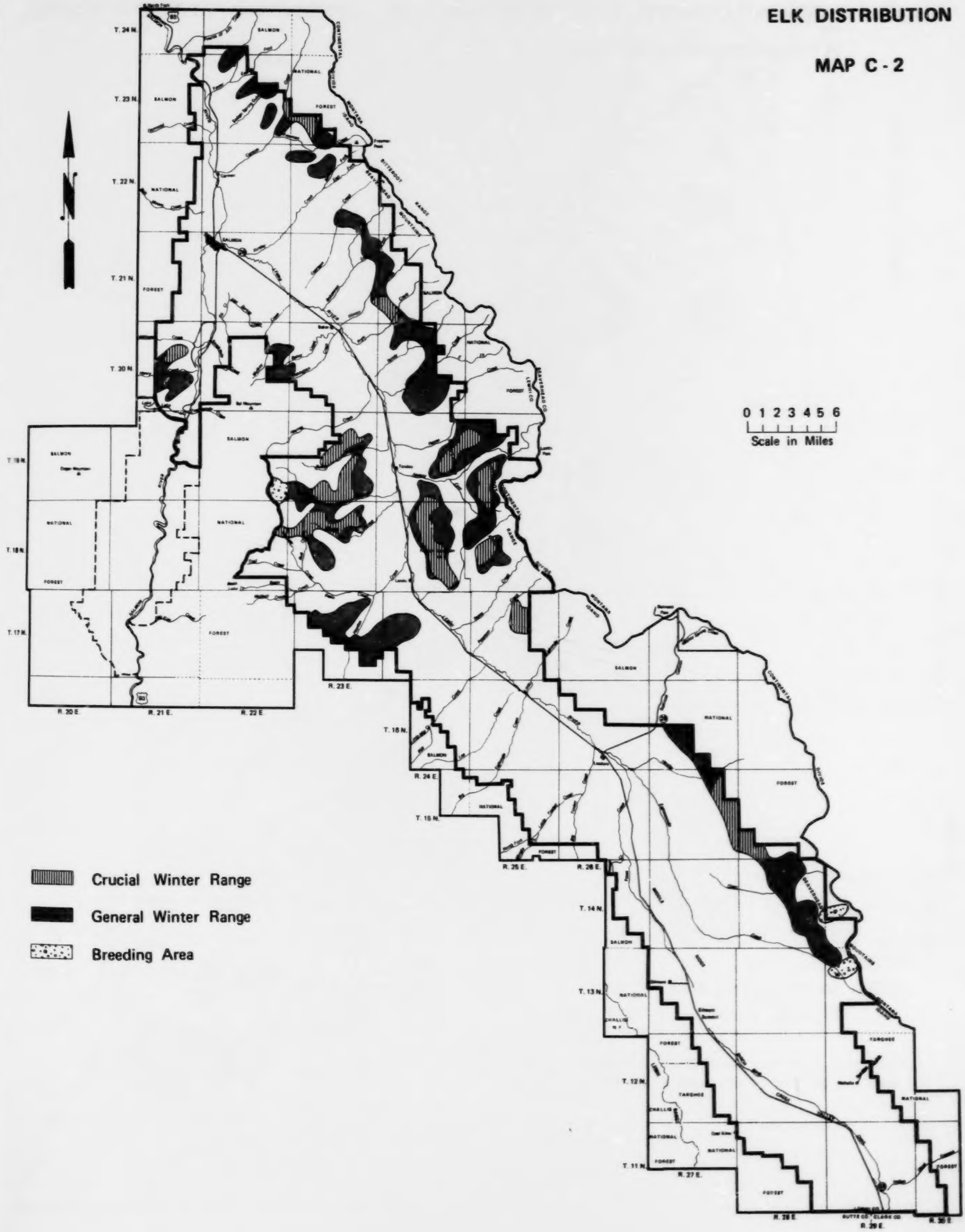
R. 29 E.
R. 30 E.
LEMHI CO.
BUTTE CO.
CLARK CO.
93

ELK DISTRIBUTION

MAP C - 2


0 1 2 3 4 5 6
Scale in Miles
N
▥ Crucial Winter Range
■ General Winter Range
▨ Breeding Area
T. 24 N.
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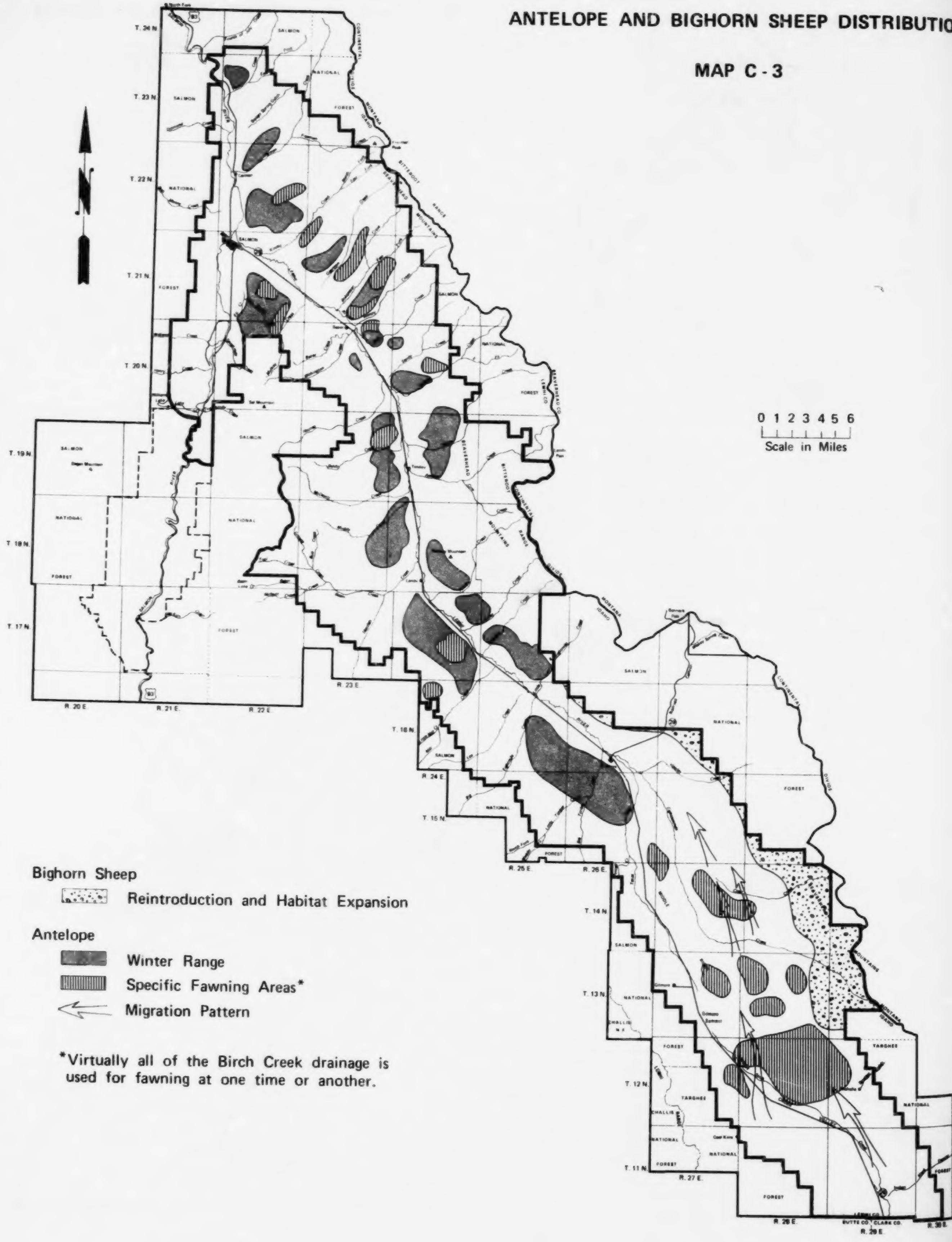
R. 30 E.
SALMON
NATIONAL
FOREST
CHALLIS
TARGHEE
CONTINENTAL DIVIDE
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
MONTANA
IDAHO
LEMHI CO.
BEAVERHEAD CO.
BUTTE CO.
CLARK CO.
Salmon
Leadore

ANTELOPE AND BIGHORN SHEEP DISTRIBUTIO

MAP C - 3



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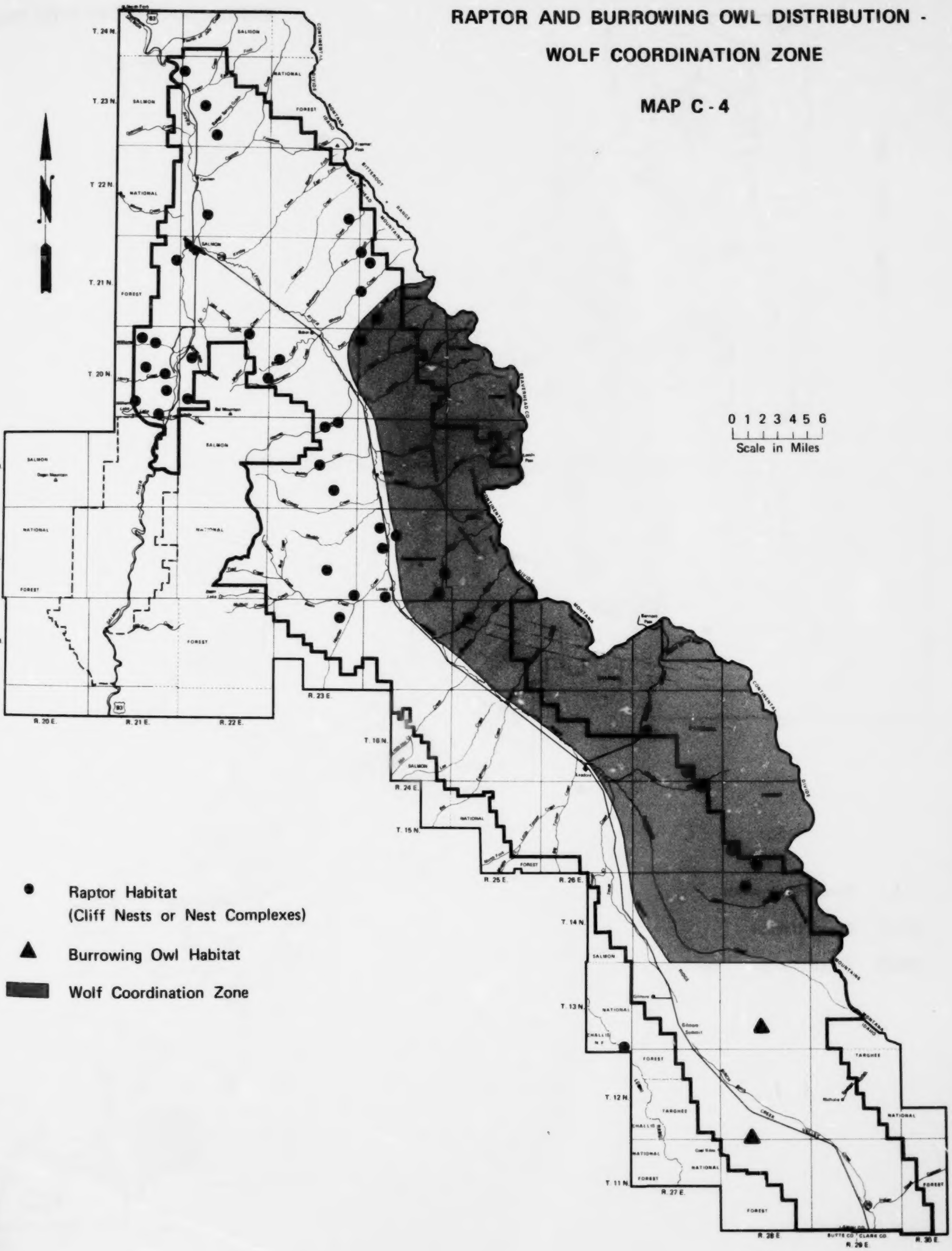
R. 28 E.
R. 29 E.
R. 30 E.
SALMON
NATIONAL
FOREST
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTEROOT MOUNTAINS
BEAVERHEAD
RANGE
SALMON
LEMHI CO.
BEAVERHEAD CO.
SALMON RIVER
LEMHI RIVER
CHALLIS N.F.
TARGHEE
BUTTE CO.
CLARK CO.
0 1 2 3 4 5 6
Scale in Miles
Bighorn Sheep
Reintroduction and Habitat Expansion
Antelope
Winter Range
Specific Fawning Areas*
Migration Pattern

*Virtually all of the Birch Creek drainage is used for fawning at one time or another.

RAPTOR AND BURROWING OWL DISTRIBUTION - WOLF COORDINATION ZONE

MAP C - 4



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Scale in Miles
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R. 30 E.
SALMON
NATIONAL
FOREST
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
BEAVERHEAD CO.
Salmon
Leadore
Gilmore
TARGHEE
CHALLIS N.F.
LEMHI CO.
BUTTE CO.
CLARK CO.

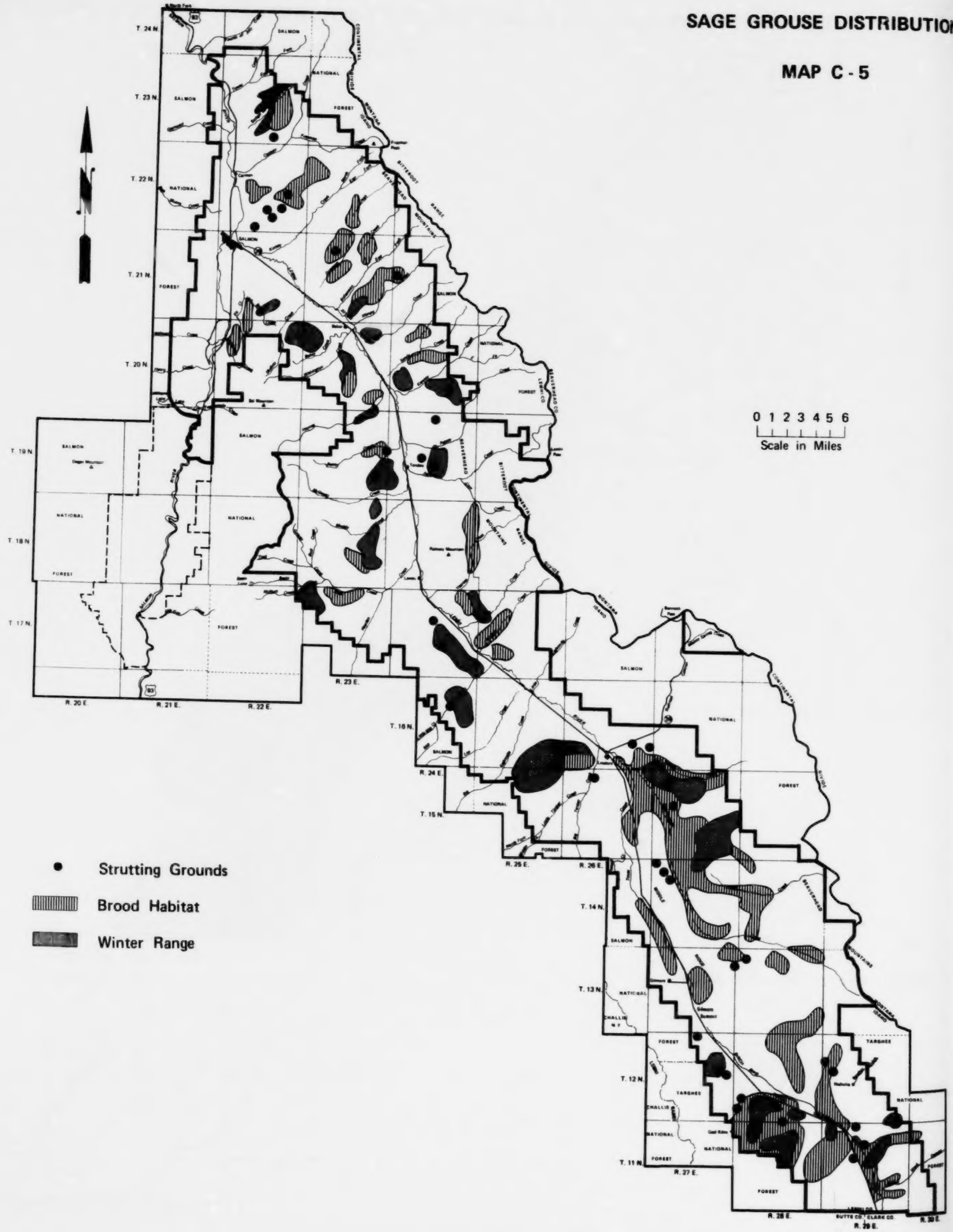
● Raptor Habitat (Cliff Nests or Nest Complexes)

▲ Burrowing Owl Habitat

■ Wolf Coordination Zone

SAGE GROUSE DISTRIBUTION

MAP C - 5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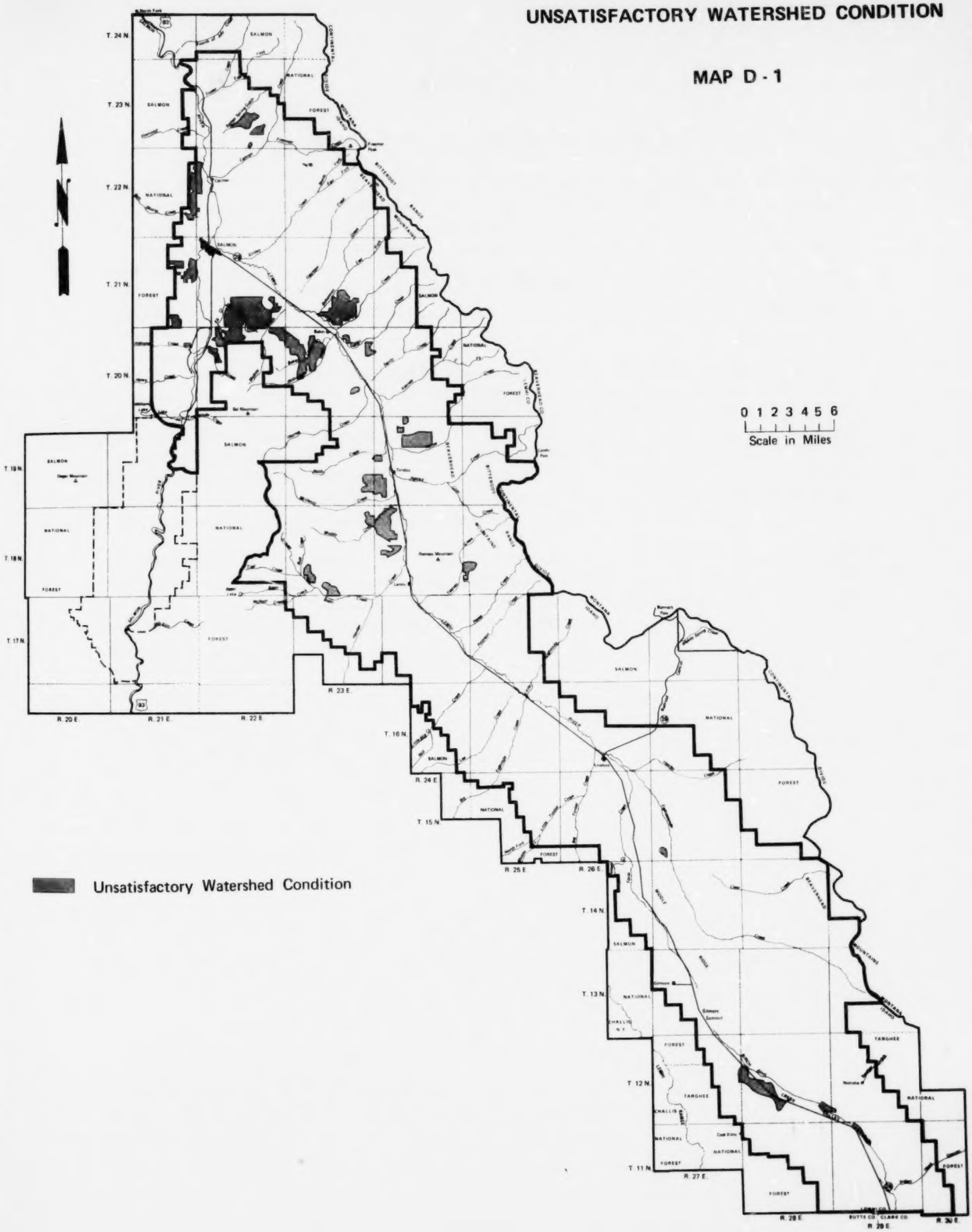
R. 27 E.
R. 28 E.
R. 29 E.
R. 30 E.
SALMON
NATIONAL
FOREST
CHALLIS
TARGHEE
BEAVERHEAD
BITTERROOT
MOUNTAINS
RANGE
CONTINENTAL
DIVIDE
MONTANA
IDAHO
LEMHI CO.
BUTTE CO.
CLARK CO.
BEAVERHEAD CO.
0 1 2 3 4 5 6
Scale in Miles
● Strutting Grounds
▨ Brood Habitat
■ Winter Range

APPENDIX D

WATERSHED AND RIPARIAN PREFERRED ALTERNATIVE ANALYSIS

UNSATISFACTORY WATERSHED CONDITION

MAP D - 1



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R. 28 E.
R. 29 E.
R. 30 E.
SALMON
NATIONAL
FOREST
CHALLIS N.F.
TARGHEE
CONTINENTAL DIVIDE
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
MONTANA
IDAHO
LEMHI CO.
BEAVERHEAD CO.
BUTTE CO.
CLARK CO.
SALMON
LEMHI RIVER
93
0 1 2 3 4 5 6
Scale in Miles
▬ Unsatisfactory Watershed Condition

APPENDIX D

WATERSHED PREFERRED ALTERNATIVE ANALYSIS

Watershed condition was formulated by using three parameters: 1) slope; 2) soil K factors (reflects the erodibility of the soil); and 3) ecological range condition. Riparian areas contribute to watershed condition, but because of their importance, were considered a separate resource. Although there are areas with steep slopes, they did not coincide with poor and fair range condition or highly erosive soils. This left soil erodibility and range condition as the two primary factors influencing watershed condition.

Areas having highly erosive soils and either poor or fair range condition amounted to 20,860 acres. Half of this acreage has very little potential for improvement. These areas are characterized by low elevation, low precipitation, bentonite badlands. The soils have low coarse fragment content increasing their susceptibility to water erosion and have a high clay percentage limiting available water holding capacity. As the potential for improvement increases to moderate and then high, the amount of clay in the soil decreases and the amount of coarse fragment increases.

The Preferred Alternative is the most reasonable approach to watershed improvement that can be expected within the planning period covered by the RMP (20 years). This approach takes into consideration low potential for improvement that characterizes the areas of unsatisfactory watershed condition.

APPENDIX D
WATERSHED PREFERRED ALTERNATIVE ANALYSIS

TABLE D-1

	Unsatisfactory Watershed Condition (Acres) Potential for Improvement				Acres Improved From Unsatisfactory to Satisfactory
Allotment	High	Moderate	Low	Total	
Badger Spring		226	800	1,026	
Deriar Creek	75		450	525	75
Fenster Creek			89	89	
Bob Moore		50	593	643	50
Chipps Creek		200	1,022	1,222	
Coal Mine Gulch	75	100	702	877	75
Hot Springs	415	2,640	2,300	5,355	535
Perreau Creek	40	50	400	490	40
Joe Moore		240	336	576	
Pratt Creek	50	50	202	302	50
County Road			172	172	
Baker Creek		644	963	1,607	
Wimpey Creek	60	100	599	759	60
Haynes Creek			81	81	
Lower Basin		21	20	41	21
Baldy Basin	107	700	263	1,070	107
McDevitt Creek	125	1,000	427	1,552	125
Grouse Creek	87	500	288	875	87
Rooster Comb		20	28	48	20
Rattlesnake			61	61	
Warm Springs	100	650	380	1,130	100
Pattee Creek	30	96	120	246	30
Yearian Creek	35	292		327	35
Turner			119	119	
Bull Creek	10	55		65	10
Powderhorn			15	15	
Spring Canyon	75	1,103		1,178	75
Cottonwood		113		113	
Coal Kiln		296		296	
TOTALS	1,284	9,146	10,430	20,860	1,495

RIPARIAN PREFERRED ALTERNATIVE ANALYSIS

The importance of riparian areas to water quality and quantity, wildlife, fisheries, livestock, and recreation has resulted in handling these areas separately for analysis purposes. Riparian forage utilization by livestock was the main factor analyzed for riparian condition classification although ecological riparian condition was also a consideration.

Figures of between 50 and 60 percent utilization are standards by which studies have shown that if exceeded the productivity and health of riparian areas is greatly reduced. Those allotments categorized as having minor riparian problems either have very few riparian areas, the riparian areas are relatively unimportant (i.e., intermittent streams), riparian zones exceed the 60 percent utilization figure by a small amount or have a few isolated problem riparian areas.

The category of riparian problems evident is indicative of allotments that have small, yet valuable riparian areas, that are receiving heavy utilization, or have extensive riparian areas that are consistently receiving 60 to 75 percent utilization.

Allotments with serious riparian problems are characterized by extensive overutilization on most or all riparian areas within the allotment, or have highly visible, high quality riparian areas that are being overutilized. Allotments in this category consistently have riparian areas with 90 to 100 percent utilization.

Those riparian areas being fenced will see drastic improvement within four to six years. Those areas expected to improve through livestock use adjustments will be much slower to respond. Allotment management plans must be written, monitoring trend studies must be initiated and read, and coordination and consultation with permittees conducted. This must take place before any livestock use adjustments can be initiated. A 6 to 10 year period following livestock adjustments to proper riparian usage will be needed to realize any riparian improvements. With this taken into consideration, the 275 riparian acres being improved by livestock use modifications is a realistic figure for the 20-year life of the RMP.

APPENDIX D
RIPARIAN PREFERRED ALTERNATIVE ANALYSIS

TABLE D-2

Allotment	Minor Riparian Problems	Riparian Problems Evident	Serious Riparian Problems	Amount of Riparian Improvement Expected		
				None	Little	Moderate
Tower Creek	X			X		
Badger Spring			X			X
Bird Creek		X				X
Diamond Creek	X			X		
Freeman Creek	X			X		
South Carmen			X			X
Deriar Creek	X				X	
Fenster Creek	X				X	
Kirtley Creek	X			X		
Geertson Creek	X			X		
Bob Moore	X				X	
Chipps Creek	X			X		
Bohannon Creek	X			X		
WF Wimpey Creek	X			X		
Coal Mine Gulch		X			X	
Hot Springs			X			X
Perreau Creek			X			X
Joe Moore			X			X
EF Wimpey Creek	X			X		
Pratt Creek	X				X	
Pronghorn	X				X	

TABLE D-2 (Continued)

Allotment	Minor Riparian Problems	Riparian Problems Evident	Serious Riparian Problems	Amount of Riparian Improvement Expected		
				None	Little	Moderate
County Road	X			X		
Baker Creek			X			X
Williams Creek		X			X	
Henry Creek	X			X		
Lake Creek			X			X
Ten Mile	X			X		
Wimpey Creek	X				X	
Dummy Creek						
Haynes Creek			X	X		
Lower Basin		X		X		
Baldy Basin			X		X	
McDevitt Creek			X			X
Grouse Creek			X		X	
Basin Creek		X			X	
McNutt Creek	X			X		
Rooster Comb		X			X	
Little Sawmill	X			X		
Mill Creek	X			X		
Walters Creek	X			X		
Lee Creek		X			X	
Big Springs	X			X		
Horse Heaven	X			X		
Everson Creek	X			X		

TABLE D-2 (Continued)

Allotment	Minor Riparian Problems	Riparian Problems Evident	Serious Riparian Problems	Amount of Riparian Improvement Expected		
				None	Little	Moderate
Big Eightmile	X			X		
Nef #1	X			X		
Nef #2	X			X		
Dump	X			X		
State Section	X			X		
Deer Park	X			X		
Adams Creek	X			X		
Milk Creek	X			X		
Timber Creek		X			X	
Leadore Hill		X			X	
Sandy Creek	X			X		
Kinney Creek	X			X		
Rattlesnake	X			X		
Warm Springs			X			X
Pattee Creek			X			X
Gould Basin	X			X		
Squaw Creek			X		X	
Pritchard Gulch	X			X		
Big Dry Canyon	X			X		
Napo Canyon	X			X		
Yearian Creek			X			X
Lower Reese Creek		X			X	
Cedar Gulch		X			X	

TABLE D-2 (Concluded)

Allotment	Minor Riparian Problems	Riparian Problems Evident	Serious Riparian Problems	Amount of Riparian Improvement Expected		
				None	Little	Moderate
Little Eightmile	X			X		
Mollie Gulch	X			X		
Jakes Canyon	X			X		
Turner	X			X		
Free Strip	X			X		
Leadore	X			X		
Leadville	X			X		
Hawley Creek	X			X		
Bull Creek	X				X	
Tex Creek	X			X		
Powderhorn	X			X		
Chamberlain Creek		X			X	
Center Ridge	X			X		
Spring Canyon	X				X	
Cottonwood	X			X		
Smelter Gulch	X			X		
Indianhead	X			X		
Mammoth/Sawmill	X			X		
Coal Kiln	X			X		
Purcell Creek	X			X		
Nez Perce	X			X		

APPENDIX E

SOILS AND VEGETATION

APPENDIX E

SOILS AND VEGETATION

TABLE E-1
GENERAL SOILS AND ASSOCIATED VEGETATION LEGEND FOR MAP E-1

Map Unit #	Acres	Percent	Descriptions
1	17,473	3.8	Nearly level to rolling, shallow to very deep soils on fan terraces derived primarily from limestone. The dominant vegetation is Wyoming big sagebrush and bluebunch wheatgrass. The precipitation ranges from 8 to 11 inches.
2	65,272	14.2	Nearly level to rolling, very deep soils on fan terraces derived primarily from quartzite. The dominant vegetation is Wyoming big sagebrush and bluebunch wheatgrass. The precipitation ranges from 8 to 11 inches.
3	0	0	Private ground on stream terraces and valley bottoms derived from mixed sources (not measured).
4	34,371	7.5	Cold soils, nearly level to rolling, shallow to very deep soils on fan terraces derived primarily from limestone. The dominant vegetation is low sagebrush and bluebunch wheatgrass. The precipitation ranges from 11 to 13 inches.
5	38,622	8.4	Cold soils, nearly level to rolling, very deep soils on fan terraces derived primarily from quartzite. The dominant vegetation on the drier sites, generally south slopes, is three-tip sagebrush and Idaho fescue. The dominant vegetation on the moister sites, generally north slopes, is mountain big sagebrush and Idaho fescue. The precipitation ranges from 13 to 16 inches annually.
6	67,942	14.8	Mountain soils, rolling or hilly, very deep soils on foothills derived primarily from lacustrine sediments. The dominant vegetation on the driest sites is Wyoming big sagebrush, shadscale saltbush, and bluebunch wheatgrass. The moister sites have Wyoming big sagebrush and bluebunch wheatgrass. The moistest sites have three-tip sagebrush and Idaho fescue. The precipitation ranges from 7 to 16 inches.

TABLE E-1 (Continued)
GENERAL SOILS AND ASSOCIATED VEGETATION LEGEND FOR MAP E-1

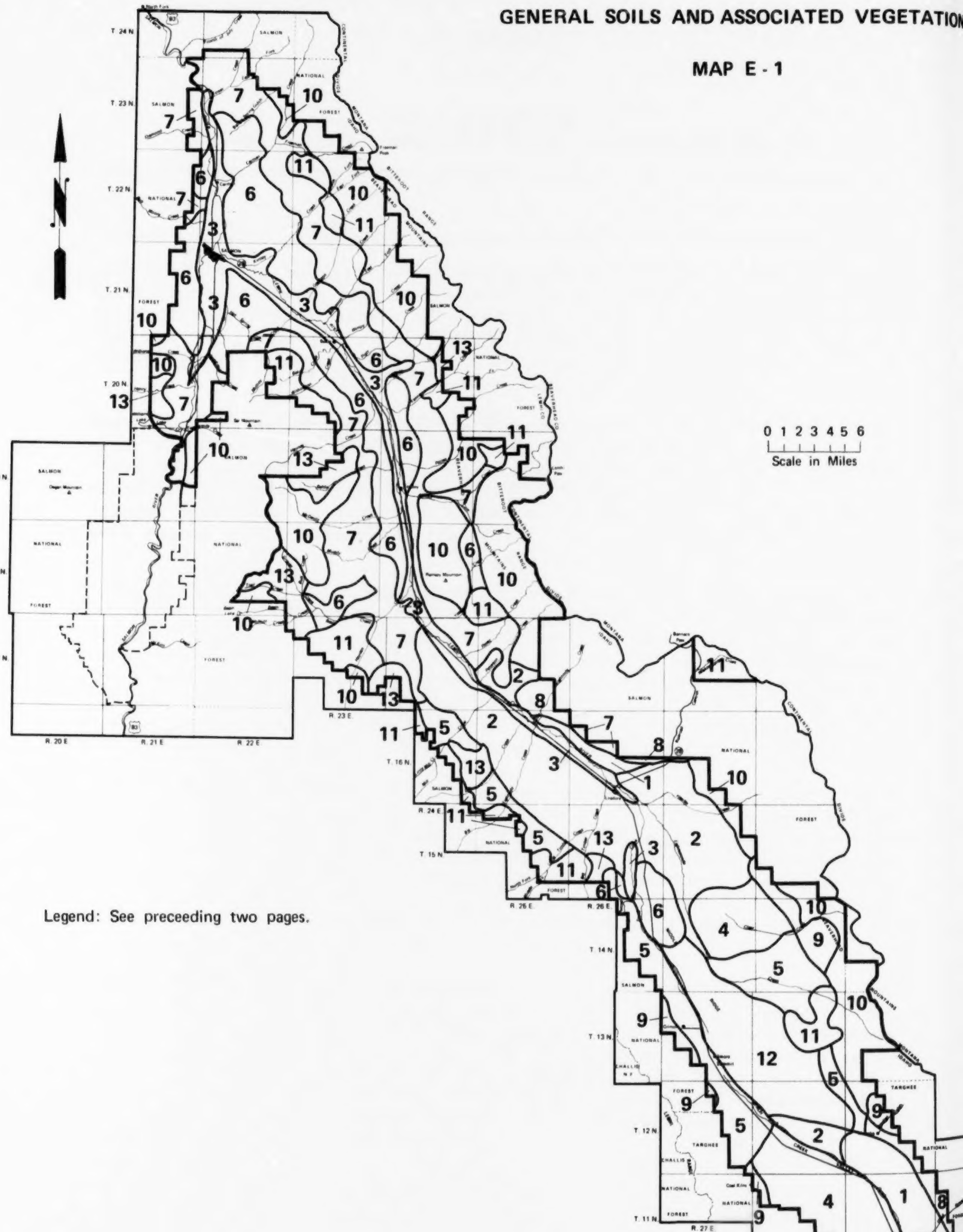
Map Unit #	Acres	Percent	Descriptions
7	92,475	20.1	Mountain soils, hilly to very steep, very deep soils on mountains and foothills derived primarily from extrusive igneous volcanics. The dominant vegetation is Wyoming big sagebrush and bluebunch wheatgrass, and precipitation ranges from 8 to 13 inches.
8	8,178	1.8	Mountain soils, hilly or steep, very deep soils on mountains and foothills derived primarily from limestone. The dominant vegetation is shadscale saltbush and Indian ricegrass on the drier sites and Wyoming big sagebrush and bluebunch wheatgrass on the moister sites. Precipitation ranges from 7 to 11 inches.
9	10,722	2.3	Cold mountain soils, hilly to very steep, very deep soils on mountains derived primarily from limestone. The dominant vegetation on the driest sites is low sagebrush and bluebunch wheatgrass. The moister sites are dominated by mountain big sagebrush and Idaho fescue. The wettest sites are dominated by Douglas fir and pinegrass. The precipitation ranges from 11 to 23 inches.
10	46,412	10.1	Cold mountain soils, steep to very steep, very deep soils on mountains derived primarily from quartzite. The dominant vegetation is three-tip sagebrush and Idaho fescue on drier sites such as south-facing slopes. The moister sites, generally north slopes, are dominated by Douglas fir and pinegrass. The precipitation ranges from 13 to 23 inches annually.
11	31,968	7.0	Cold mountain soils, hilly or steep, very deep soils on mountains and foothills derived dominantly from glacial till or extrusive igneous volcanics. The drier sites have three-tip sagebrush or early sagebrush and Idaho fescue. The moister sites have mountain big sagebrush and Idaho fescue. The precipitation ranges from 13 to 16 inches.

TABLE E-1 (Concluded)
GENERAL SOILS AND ASSOCIATED VEGETATION LEGEND FOR MAP E-1

Map Unit #	Acres	Percent	Descriptions
12	29,031	6.3	Cold mountain soils, rolling or hilly, very deep soils on foothills derived primarily from lacustrine sediments. The dominant vegetation is mixed low sagebrush, three-tip sagebrush, or mountain big sagebrush, and Idaho fescue. The precipitation ranges from 13 to 16 inches.
13	17,110	3.7	Cold mountain soils, hilly to very steep, very deep soils on mountains derived primarily from extrusive igneous volcanics. The dominant vegetation on the drier sites is three-tip sagebrush and Idaho fescue. The moister sites have Douglas fir and pinegrass. The precipitation ranges from 13 to 23 inches.

GENERAL SOILS AND ASSOCIATED VEGETATIO

MAP E - 1



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Scale in Miles
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R. 29 E.
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NATIONAL
FOREST
CHALLIS N.F.
TARGHEE
CONTINENTAL DIVIDE
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
MONTANA
IDAHO
LEMHI CO.
BUTTE CO.
CLARK CO.
LEMHI RANGE
93
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13

Legend: See preceeding two pages.

APPENDIX F

RECREATION AND VISUAL RESOURCE MANAGEMENT

APPENDIX F

RECREATION

VISUAL RESOURCE MANAGEMENT SYSTEM

General Guidance

The visual resource inventory process provides Bureau managers with a means for determining visual resource values so that visual resources can be considered in resource management planning and in the design and construction of projects. The inventory consists of an evaluation of scenic quality, analysis of sensitivity levels, and determination of distance zones. Based upon these three factors, each area of land is placed into one of four visual resource inventory classes. Each class has an objective for protecting visual resources, with allowances for visual change to the existing landscape. These inventory classes are then submitted for consideration when developing resource management plans (RMPs). Adjustments to the visual classes are made if necessary during the development of RMPs, and the approved management classes become part of the final plan.

Where the resource characteristics, land use patterns, or ownership patterns vary significantly from the norm in the Bureau, it may be necessary to adapt procedures to efficiently meet the objectives of the Visual Resource Management (VRM) system. These adaptations are encouraged if: (1) they are the most cost-effective way to obtain necessary data and (2) the conceptual framework of the VRM inventory system remains intact.

Visual Resource Classes and Objectives

Visual resource classes are categories assigned to public lands which serve as (1) an inventory tool that portrays the relative value of the visual resources and (2) a management tool that portrays the visual management objectives. There are four classes--I, II, III, and IV. Inventory class I is assigned to special areas where a decision has been made to maintain a natural landscape. Inventory classes II, III, and IV are assigned based on scenic quality, sensitivity level, and distance zone classifications. Management classes are assigned based on multiple use considerations through the RMP process. Each class has an objective that prescribes a level of acceptable change to the characteristic landscape from a visual resources standpoint. Since management class selection is a management decision, adjustments to class boundaries may occur when RMPs are prepared. Inventory classes II, III, and IV are mapped by overlaying the distance zone overlay with the scenic quality and sensitivity level overlays to come up with the visual resource inventory class overlay.

Class I Objective

The objective of this class is to preserve the existing character of the landscape. Only Congressionally authorized areas or areas approved through the planning process, where the goal is to provide a landscape setting that appears unaltered by man, should be placed in this class. The level of change to the characteristic landscape should be extremely low because only very limited development, such as hiking trails, should occur in these areas.

Class II Objective

The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III Objective

The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Class IV Objective

The objective of this class is to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape may be high. Management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of activities through careful location, minimal disturbance, and repetition of the basic elements.

Rehabilitation Areas

Areas in need of rehabilitation from a visual standpoint should be noted during the inventory process. The level of rehabilitation is determined through the RMP process by assigning the VRM class approved for that particular area.

Interim VRM Classes and Objectives

Interim visual management objectives are established where a project is proposed and there are no approved VRM objectives. Interim objectives must conform with the land use allocations set forth in the plan that covers the project area. The establishment of interim VRM objectives does not require an RMP amendment unless the project itself requires one.

Visual Contrast Rating System

The contrast rating system is a guide, not a decision process. The ratings are used as indicators of the degree to which proposed projects will fit into the landscape. A contrast rating that exceeds the maximum allowed for a project "flags" strong contrasts that should be mitigated before the project is approved and implemented.

The contrast rating system is used (1) as a design tool during the project planning and design process, (2) as an environmental assessment tool to identify visual impacts of proposed management activities, and (3) and as an aid in identifying mitigating measures or stipulations to reduce visual impacts.

Contrast ratings are required for all projects, except for some small or repetitive ones, proposed for highly sensitive areas and for potentially high impact projects regardless of location. A concise narrative assessment may be sufficient for small and repetitive projects in highly sensitive and other areas. Whichever approach is used, contrast rating or narrative assessment, it is important to remember that the goal is to minimize the visual impacts of a project and that the cumulative impacts of many small unmitigated projects may add up to a significant impact over time. Highly sensitive areas and high impact projects are discussed below.

Highly sensitive areas include public lands where the protection of scenic values has been given high priority either through Bureau planning efforts or through other federal, state, or local plans or designations. It may also include areas where public controversy or possible law suits may result if the proposed management action is implemented or denied. Highly sensitive areas may include, but not be limited to, the seen areas associated with:

1. VRM Class I and II areas, and VRM Class III areas with high sensitivity levels

2. Areas under interim wilderness management policy

3. Major roads

4. Designated scenic highways or roads

5. Designated public use sites, including campgrounds, picnic areas, observation areas, overlooks, trails, rivers, etc.

6. Special areas such as primitive areas, outstanding natural areas, national natural landmarks, environmental study areas, national parks, national recreation areas, wilderness areas, and areas of critical environmental concern (ACECs)

Potentially high impact projects are usually large-scale projects which cause considerable surface disturbance. High impact projects may include:

1. New roads or substantial road improvements
2. Pipelines
3. Most timber harvests, including clearcuts
4. Vegetation manipulations such as chaining, spraying, and controlled burns
5. Reservoirs and water tanks
6. Mining operations covering 5 or more acres
7. Geothermal developments
8. Windfarm developments
9. Power generation stations
10. Powerlines
11. Communication sites, microwave repeaters, etc.
12. Oil and gas development - drill pads, etc.
13. Large structures or groupings of structures
14. Sanitary landfills

Steps in the Contrast Rating Process

Obtain Project Descriptions. To effectively evaluate the visual impacts of a proposed project, a detailed project description is needed. The level of detail required in the description should be commensurate with the type of project proposed. This information is usually supplied by the applicant for non-Bureau initiated projects.

Ascertain the Contrast Rating. The actual rating process can be done as a team effort or individually, depending on the sensitivity and impacts of the project and the availability of personnel. If done as a team, it is best to do the ratings individually and then compare ratings. A simulation should be available to show scale, relative placement of disturbing features, and other important information necessary to complete an objective rating.

Determine the Level of Change. This evaluation is the means for determining whether or not a project meets the visual resource management objectives. The information generated in the degree of contrast rating provides the basis for this rating. Generally, the level of change rating will correspond on a relative scale with the degree of contrast rating (i.e., high = strong, moderate = moderate, etc.). Consequently a "strong" contrast rating for one or more of the elements or features will usually result in a "high" level of change rating. A "high" rating may also result from two or more "moderate" contrast ratings for the dominant elements. For example, if the dominant element is line and the ratings for two or three of the features under line are "moderate," the level of change rating could be "high". The criteria are applied to the project as a whole so that cumulative effects of the element contrasts can be visualized.

Determine Whether VRM Objectives Are Met. The "level of change" rating is compared with the change allowed in the approved VRM Class for the area. If the level of change exceeds the VRM objective, a detailed explanation describing the major features and elements that caused the change is provided.

Develop Additional Mitigating Measures. Measures are developed to mitigate the contrasts identified during the contrast rating process. Since the goal is to minimize visual impacts, mitigating measures should be prepared for all projects where there are adverse contrasts that can be reduced. This also includes projects that have met the VRM objectives. Mitigating measures should be written so they can easily be extracted and used as stipulations in leases, permits, and contracts. When preparing mitigating measures, the concepts of strategic location (in less visible and less sensitive areas), minimizing of disturbance, and repetition of the basic elements (form, line, color, and texture) must be kept in mind.

RECREATION OPPORTUNITY SPECTRUM (ROS) CLASS DESCRIPTIONS

There are six recreation opportunity spectrum (ROS) classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, semi-urban (rural), and urban.

Table F-1 describes each of the six ROS classes in terms of (1) experience opportunities, (2) setting opportunities, and (3) activity opportunities. These descriptors provide a general overview of the opportunities included in each class. The overview statements do not describe each class in detail but rather provide a point of departure from which the planner or manager can develop more precise prescriptions for each class based on specific situations encountered in field operations. The listing of activity opportunities is provided for illustrative purposes only; it does not include all activity opportunities on the public lands.

TABLE F-1
RECREATION OPPORTUNITY SPECTRUM (ROS) CLASS DESCRIPTIONS

Opportunity Class	Experience Opportunity	Setting Opportunity	Activity Opportunity
Primitive	Opportunity for isolation from the sights and sounds of man, to feel a part of the natural environment, to have a high degree of challenge and risk, and to use outdoor skills.	Area is characterized by essentially unmodified natural environment of fairly large size. Concentration of users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Only facilities essential for resource protection are used. No facilities for comfort or convenience of the user are provided. Spacing of groups is informal and dispersed to minimize contacts between groups. Motorized use within the area is not permitted.	Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, and waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (non-motorized craft).
Semi-Primitive Non-motorized	Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.	Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low; however, evidence of other area users is often present. On-site controls and restrictions may be present but are subtle. Facilities are provided only for the protection of resource values and the safety of users. Formal spacing of groups may occur to disperse use and limit contacts between groups. Motorized use is not permitted.	Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, and waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing, and river running (non-motorized craft).
Semi-Primitive Motorized	Some opportunity for isolation from the sights and sounds of man, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Explicit opportunity to use motorized equipment while in the area.	Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but often there is evidence of other area users. On-site controls and restrictions may be present but are subtle. Facilities are provided for the protection of resource values and safety of users only. Formal spacing of groups may occur to disperse use and limit contacts between groups. Motorized use is permitted.	Same as the above, plus the use of off-road vehicles, four-wheel drives, dune buggies, dirt bikes, snowmobiles, and power boats.
Roaded Natural	About equal opportunities for affiliation with other user groups and for isolation from the sights and sounds of man. Opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important except in specific challenging activities. Practice of outdoor skills may be important. Opportunities for both motorized and non-motorized recreation are present.	Area is characterized by a generally natural environment with moderate evidence of the sights and sounds of man. Resource modification and use practices are evident but harmonize with the natural environment. Concentration of users is low to moderate, with facilities sometimes provided for group activity. On-site controls and restrictions offer a sense of security. Rustic facilities are provided for user convenience as well as for safety and resource protection. Conventional motorized use is provided for in construction standards and design of facilities.	All activity opportunities listed previously, plus picnicking, rock collecting, wood gathering, auto touring, downhill skiing, snowplay, ice skating, waterskiing and other water sports, hang gliding, interpretive use, rustic resorts, and organized camps.
Semi-Urban (also called Rural)	Opportunities to experience affiliation with individuals and groups are prevalent, as is the convenience of sites and opportunities. These factors are generally more important than the natural setting. Opportunities for wildland challenges. Risk taking and testing of outdoor skills are unimportant, except in those activities involving challenge and risk.	Area is characterized by a substantially modified natural environment. Resource modification and use practices are obvious. Sights and sounds of man are readily evident and the concentration of users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for specific activities. Developed sites, roads, and trails are designed for moderate to high use. Moderate densities are provided far away from developed sites. Facilities for intensive motorized use are available.	All activity opportunities listed previously, plus competitive games, spectator sports, bicycling, jogging, outdoor concerts, and modern resorts.

TABLE F-1 (Concluded)
RECREATION OPPORTUNITY SPECTRUM (ROS) CLASS DESCRIPTIONS

Urban	Opportunities to experience affiliation with individuals and groups are prevalent, as is the convenience of sites and opportunities. Experiencing the natural environment and the use of outdoor skills are largely unimportant.	Area is characterized by a highly modified environment, although the background may have natural elements. Vegetation is often exotic and manicured. Soil may be protected by surfacing. The sights and sounds of man on-site predominate. Large numbers of users can be expected. Modern facilities are provided for the use and convenience of a large number of people. Controls and restrictions are obvious and numerous. Facilities for high intensity motor use and parking are present and forms of mass transit are often available.	All activity opportunities listed previously.

OFF-ROAD VEHICLE (ORV) DESIGNATIONS DEFINED IN EXECUTIVE ORDER 11644

Open, limited, and closed designations apply only to public land within the designated boundary. These designations are not intended to affect use of private, county-maintained, or state roads.

Open Areas and Trails

Off-road vehicles (ORVs) may be used subject to the operating regulations and vehicle standards set forth in Title 43 of the Code of Federal Regulations (CFR) Subparts 8341 and 8343. All public land not designated as limited or closed will be designated as open.

Sensitive Open Areas

These areas are open to ORV use but contain certain resource values that are sensitive to adverse impacts from ORV activity, especially if the existing level or extent of ORV use increases. These areas should receive special attention in the BLM monitoring program to ensure that the open designation is amended if it is determined that ORV use is causing considerable adverse impacts. BLM should take special care to discourage ORV use of these areas, especially commercial or group recreational vehicle activities.

Limited Areas and Trails

Use of ORVs is subject to restrictions deemed appropriate by the authorized officer. Restrictions may limit the number or types of vehicles allowed, dates and times of use, and similar matters. Limited areas and trails may be designated for special or intensive use, such as organized recreational events, and may be subject to rules set forth in 43 CFR 8341.2.

Limited to Existing Roads and Trails

Cross-country vehicle travel is prohibited; all vehicle use is restricted to existing roads and trails.

Limited to Designated Roads and Trails

Cross-country vehicle travel is prohibited on lands in this category. All vehicles are limited to designated roads and trails. Roads and trails where vehicle travel is permitted will have signs indicating they are open.

Closed Areas and Trails

ORV use is permanently or temporarily prohibited. County and state roads are not subject to this designation.

CLASSIFICATION CRITERIA FOR WILD, SCENIC, AND RECREATIONAL RIVER AREAS

Table F-2 describes the classification criteria, in terms of four attributes, for wild, scenic, and recreational river areas. As the table illustrates, the criteria are most stringent for wild river areas and least stringent for recreational rivers.

TABLE F-2
CLASSIFICATION CRITERIA FOR WILD, SCENIC, AND RECREATIONAL RIVER AREAS

ATTRIBUTE	WILD	SCENIC	RECREATIONAL
Water Resources Development	Free of impoundment.	Free of impoundment.	Some existing impoundment or diversion.
			The existence of low dams, diversions, or other modifications of the waterway is acceptable, provided the waterway remains generally natural and riverine in appearance.
Shoreline Development	Essentially primitive. Little or no evidence of human activity.	Largely primitive and undeveloped. No substantial evidence of human activity.	Some development. Substantial evidence of human activity.
	The presence of a few inconspicuous structures, particularly those of historic or cultural value, is acceptable.	The presence of small communities or dispersed dwellings or farm structures is acceptable.	The presence of extensive residential development and a few commercial structures is acceptable.
	A limited amount of domestic livestock grazing or hay production is acceptable.	The presence of grazing, hay production, or row crops is acceptable.	Lands may be developed for the full range of agricultural and forestry uses
	Little or no evidence of past timber harvest. No ongoing timber harvest.	Evidence of past or ongoing timber harvest is acceptable, provided the forest appears natural from the riverbank.	May show evidence of past and ongoing timber harvest
Accessibility	Generally inaccessible except by trail.	Accessible in places by road.	Readily accessible by road or railroad.
	No roads, railroads, or other provision for vehicular travel within the river area. A few existing roads leading to the boundary of the river area are acceptable.	Roads may occasionally reach or bridge the river. The existence of short stretches of conspicuous, or longer stretches of inconspicuous, roads or railroads is acceptable.	The existence of parallel roads or railroad on one or both banks as well as bridge crossings and other river access points is acceptable.
Water Quality	Meets or exceeds federal criteria or federally approved state standards for aesthetics, for propagation of fish and wildlife normally adapted to the habitat of the river, and for primary contact recreation (swimming) except where exceeded by natural conditions.	No criteria are prescribed by the Wild and Scenic Rivers Act. However, the Federal Water Pollution Control Act Amendments of 1972 established a national goal that all waters of the United States be made fishable and swimmable. Rivers will not be precluded from scenic or recreational classification because of poor water quality at the time of their study, provided a water quality improvement plan exists or is being developed in compliance with applicable federal and state laws.	

SOURCE: Federal Register, Vol. 47. No. 173, Tuesday, September 7, 1982, Notices, No. 39461

NOTE: Table should be used only in conjunction with text.

APPENDIX G

DRAFT EIGHTEENMILE WILDERNESS EIS

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CHAPTER 1

INTRODUCTION AND PLANNING PROCESS

Purpose and Need

The purpose of the proposed action is to manage and preserve the wilderness characteristics on 14,796 acres in the Eighteenmile Wilderness Study Area (WSA) and to manage 10,126 acres in the WSA for uses other than wilderness. This environmental impact statement (EIS) assesses the environmental consequences of managing the WSA as wilderness or nonwilderness, and of managing only a portion of the WSA as wilderness.

The Federal Land Policy and Management Act of 1976 mandates the Bureau of Land Management (BLM) to manage the public lands and their resources under the principles of multiple use and sustained yield. Wilderness values are identified as part of the spectrum of multiple land use values to be considered in BLM inventory, planning, and management. Section 603 of the Federal Land Policy and Management Act requires a wilderness review of BLM roadless areas of 5,000 or more acres and roadless islands.

The BLM inventory process identified wilderness study areas (WSAs) that had the mandatory wilderness characteristics (size, naturalness, and solitude and/or primitive recreation opportunities). Suitable or nonsuitable wilderness recommendations for each WSA will be presented to the President by the Secretary of the Interior. The President will then make recommendations to Congress. Areas can be designated as wilderness only by Congress. If designated as wilderness, an area would be managed in accordance with the Wilderness Act of 1964.

Location

The Eighteenmile WSA is located in east-central Idaho in the BLM's Lemhi Resource Area of the Salmon District. Maps G-1 and G-2 show the location of the WSA in relation to major features and population centers.

Environmental Issue Identification and Scoping

The scoping process for the Eighteenmile Wilderness EIS (conducted at the same time as the Lemhi Resource Management Plan (RMP)/EIS scoping process) resulted in issues being identified by the BLM staff, the public, the Salmon District Multiple Use Advisory Council, and the Salmon District Grazing Advisory Board and in issues being raised through individual contacts with the U.S. Forest Service and Soil Conservation Service. Scoping will continue during review of the draft RMP/EIS. BLM will review comments on the issues and alternatives analyzed and assess the need for analyzing new issues and alternatives raised during the comment period.

Throughout the scoping process, consultation will continue with the Idaho State Historic Preservation Officer concerning the presence or absence of sites in the WSA that would be eligible for nomination for listing on the "National Register of Historic Places". Consultation with the U.S. Fish and Wildlife Service concerning threatened and endangered species has already occurred.

The environmental issues selected for analysis in this EIS are as follows:

1. Impacts on Wilderness Values - The wilderness values of naturalness, solitude, and primitive recreation could benefit from wilderness designation. The same values may be adversely affected by uses and actions that would occur should the WSA not be designated as wilderness. The significance of these beneficial or adverse impacts is an issue for analysis in the EIS.

2. Impacts on the Development of Mineral Resources - Wilderness designation would withdraw the designated lands from mineral entry. This would severely restrict exploration activities and preclude development of any mineral resources within the wilderness area. The effect of wilderness designation on the development of mineral resources is an issue for analysis in the EIS.

3. Impacts on Primitive and Semi-Primitive Nonmotorized Recreational Opportunities - Management of the WSA for uses other than wilderness could eliminate the areas currently rated as primitive and semi-primitive nonmotorized in character. The WSA includes all of the primitive lands in the Lemhi Resource Area. The effect of nonwilderness management on primitive and semi-primitive nonmotorized recreational opportunities is an issue for analysis in the EIS.

4. Impacts on Water Quality - Developments of known and highly probable mineral resources could adversely affect water quality in Tenmile and Clear creeks. On the other hand, water quality could benefit from wilderness designation and mineral withdrawals. The significance of these impacts is an issue for analysis in the EIS.

The following issues were identified in scoping but were not selected for detailed analysis in this EIS. The reasons for setting these issues aside are discussed below.

1. Impacts on Livestock Operations - Concerns were raised that livestock operators might have to modify their operations within designated wilderness, thus harming their business. This issue was considered but dropped because BLM's wilderness management policy provides for the continued use of wilderness areas for livestock operations at historic levels. Although the management practices of livestock operators in the WSA would be more closely regulated, they would continue as they did prior to wilderness designations, subject to reasonable regulations. The few proposed range improvements are small in scale and similar to existing improvements. The wilderness management policy allows these types of improvements in order to continue the existing livestock program. While this issue has been dropped from analysis, a brief description of the planned livestock program has been included because this is a significant nonconforming use that is specifically allowed by Congress and that includes all lands in the WSA.

2. Impacts of Wilderness Designation on Reintroduction of Bighorn Sheep. The Idaho Department of Fish and Game has noted that bighorn sheep could be reintroduced in the WSA. The reintroduction of bighorn

sheep, if it occurred, would not depend on wilderness designation. Since BLM's wilderness management policy provides guidelines for reintroduction of native wildlife species and the reintroduction is only speculative, this issue was dropped from analysis.

3. Impacts on Cultural Resources - Consultation with the Idaho State Historic Preservation Officer during scoping determined that there are no cultural sites within the WSA that are eligible for nomination for listing on the National Register of Historic Places. The archaeological sites that do exist in the area would be protected with or without wilderness designation. Since the management of cultural resources would not differ significantly with or without wilderness designation, the issue of impact to cultural resources was dropped from further analysis.

4. Impacts on Recreational Off-Road Vehicle Use - Wilderness designation would close the WSA to use by off-road vehicles (ORVs). The existing terrain naturally limits ORV use because of steep slopes and rocky terrain. Present ORV use is estimated to be less than 1 percent of the total ORV use in the Lemhi Resource Area (less than 25 visitor days per year). Based on the nearly negligible ORV use in the WSA, compared to virtually limitless similar opportunities within the remainder of the resource area, the issue of wilderness designation and its effect on ORV use was dropped from further consideration.

5. Impacts on Wildlife - An issue dealing with wildlife in general was considered but not included in this EIS because no specific population, habitat, or other environmental issue involving any specific species was identified. Based on projections of development in the WSA, little or no change in wildlife populations or habitat is anticipated with either wilderness designation or nondesignation.

6. Impacts on Endangered Species - No endangered plant species have been identified. Consultation with the U.S. Fish and Wildlife Service identified the possible occurrence of the gray wolf in the area. Since the RMP/EIS has determined that a wilderness or nonwilderness decision would not affect wildlife (the wolf's prey base) and the possibility of timber harvest is remote because of adverse economic conditions, no significant impacts to the gray wolf are anticipated (if, in fact, it does inhabit this area). This issue has therefore been dropped from further consideration.

7. Impacts on Forest Management - An issue dealing with the effect of wilderness designation on forest management was considered but not included in this EIS. Estimates made by BLM staff foresters indicate that each thousand board feet (MBF) would cost $64 more to harvest than the price a logger could receive for it from a mill. This timber is expected to remain uneconomic to harvest for at least the next 20 years and possibly longer if the current balance between supply, demand, and cost structure remains constant. No timber sales are planned for this area in the foreseeable future, so forest management was dropped as an issue.

The Planning Process and Selection of the Proposed Action

Development of the proposed action has been guided by requirements of the Bureau's Planning Regulations, 43 CFR 1600. BLM's Wilderness Study Policy (published February 3, 1982, in the Federal Register) supplements the planning regulations by providing the specific factors to be considered during the planning sequence in developing suitability recommendations.

The proposed action recommends wilderness designation for 14,796 acres with high quality wilderness values in the Eighteenmile WSA (Map G-3). The proposed action also recommends nonwilderness designation for 10,126 acres of the WSA that have lower quality wilderness values and a moderate to high potential for mineral discovery and development.

Alternatives to the Proposed Action Selected for Analysis

A range of alternatives from resource protection to resource production was formulated and evaluated for the Eighteenmile WSA. The alternatives assessed in this EIS include (1) two no wilderness alternatives, (2) an all wilderness alternative, and (3) two partial wilderness alternatives, one of these being the proposed action. The two no wilderness alternatives differ in that one would allow roaded development of the WSA, while the other would maintain as roadless a portion of the WSA that offers primitive recreation opportunities.

In this document, the no action alternative, as required by the National Environmental Policy Act, and the no wilderness/development alternative are the same. The no action alternative represents a continuation of current land use plans. No long-range land use plans have ever been completed for the Gilmore Planning Unit, which includes the Eighteenmile WSA. Management to date has occurred on a case-by-case basis and was based on a long-term nonwilderness management strategy until the wilderness study process began.

The all wilderness alternative represents the maximum possible acreage that could be recommended for wilderness designation.

The two partial wilderness alternatives fall between the all wilderness and no wilderness alternatives. In this EIS, the two partial wilderness alternatives recommend the same area for wilderness but have significantly different recommendations for future management of the area recommended for nonwilderness.

Alternatives Considered But Dropped from Analysis

A partial alternative was suggested by the Salmon National Forest. They suggested utilizing a ridgeline south of Chamberlain Creek rather than the proposed action's use of a ridgeline north of the creek as the dividing line between the recommended wilderness and nonwilderness areas. This change would eliminate any problems between the users on the roadless lands not recommended for wilderness in the Salmon National Forest and the users of adjacent BLM lands recommended for wilderness.

This alternative was considered but dropped after additional field examinations determined that the Chamberlain Creek drainage should be included in the recommended wilderness area as set forth in the proposed action. The Forest Service lands involved are completely surrounded by BLM lands and are thus isolated from the rest of the national forest at the top of the Continental Divide. Management of these Forest Service lands would not be significantly affected by BLM's wilderness recommendations.

CHAPTER 2

ALTERNATIVES INCLUDING PROPOSED ACTION

Since the pattern of future actions within the WSAs cannot be predicted with certainty, assumptions were made to allow the analysis of impacts under the Proposed Action and alternatives. These assumptions are the basis of the impacts identified in this environmental impact statement (EIS). They are not management plans or proposals but do represent feasible patterns of activities which could occur under the alternatives analyzed.

Proposed Action: Partial Wilderness/Development

A portion of the Eighteenmile WSA encompassing 14,796 acres would be recommended for wilderness designation (see Map G-3). The remaining 10,126 acres located in the northern end of the WSA would not be recommended for wilderness designation. Lands not recommended would be open for multiple use management and development, which could include road construction and surface disturbance. This alternative is depicted in the Lemhi RMP/EIS as a part of Alternative F.

Livestock and Range Actions

The proposed resource management plan (Lemhi RMP) has a goal of providing 2,388 AUMs for livestock use in the WSA when fully implemented. Initial stocking would be slightly less at 2,271 AUMs until planned range improvements achieved their purposes. The long-term AUM goal is less than the current active preference of 2,969 AUMs and the five-year average use of 2,733 AUMs. Projections beyond existing planning estimates (beyond the 15- to 20-year planning cycle) indicate it is reasonable to expect that 2,388 AUMs of use would be maintained in the future.

Four miles of fence, one mile of water pipeline, and seven developed springs would be maintained within the WSA (Map G-4). New range improvements consisting of two miles of fencing, one mile of water pipeline, and three developed springs are planned. Projections beyond existing planning estimates indicate no change in maintenance activities and no additional construction of livestock and range management facilities.

Recreational Designations and Use Opportunities

Within the WSA, 10,126 acres would remain open to off-road vehicle (ORV) use, while 14,796 acres would be closed to ORV use. Recreational ORV use is projected to remain below 25 visitor days annually for the next 5 to 10 years. Projections beyond the existing planning cycle (beyond 15 to 20 years) indicate it is reasonable to expect that recreational ORV use would increase slightly but would remain below 50 visitor days annually. Four miles of road associated with mineral development in the northern end of the WSA are expected to be constructed in the future.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting activities), camping (generally associated with hunting activities), photography, and sightseeing. Recreational use for these activities would remain below

100 visitor days for the next 10 years. Projections beyond existing planning estimates (beyond the 15- to 20-year planning cycle) indicate it is reasonable to expect that recreational use for these activities would increase slightly but would remain below 200 visitor days annually for the foreseeable future. Future recreational use would probably be oriented towards the designated wilderness area rather than the lands managed for nonwilderness uses.

No recreation facilities or developed trails exist in the WSA and none are planned. However, the four miles of road associated with mineral development would be used by hunters to gain access to the northern portion of the WSA. All of the WSA's lands offering primitive recreational opportunities (3,840 acres) and 69 percent of the lands offering semi-primitive nonmotorized opportunities (8,774 acres) would be included in the wilderness area (Map G-5).

Mineral Resource Actions

It is assumed that phosphate mining would occur on 1,920 acres and involve two miles of road construction in the area between Tenmile Creek and Dry Canyon. Renewed mining of known gypsum deposits adjacent to the WSA in Clear Creek would expand into the WSA, involving 300 acres and one mile of road construction.

It is further assumed that two mining claims would be filed and explored between Dry Canyon and Horse Thief Creek, resulting in one mile of new road and 50 acres of surface disturbance. No oil and gas drilling activity is anticipated for the nondesignated area in the WSA because drilling on land immediately adjacent to the WSA would be less costly both in terms of access road construction and drilling costs.

The 14,796 acres recommended for wilderness would be withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws upon designation by Congress.

No Wilderness/Retention Alternative

None of the WSA would be designated as wilderness (Map G-3). However, 12,614 acres would be managed to retain their existing roadless condition. All of these lands are located within the portion of the WSA recommended for wilderness in the proposed action. The remaining 12,308 acres would be open for resource development. This alternative portrays the preferred management strategy for the WSA should Congress not accept the proposed action and designate the WSA for nonwilderness management. This alternative is depicted in the Lemhi RMP/EIS as a part of Alternative G.

Livestock and Range Actions

See the proposed action for a description of projected livestock and range actions.

Recreational Designations and Use Opportunities

Within the WSA, 12,308 acres would be designated as open to ORV use, while 12,614 acres would be closed. Recreational ORV use is projected to remain below 50 visitor days annually for the next 5 to 10 years. Projections beyond the existing planning cycle (beyond 15 to 20 years) indicate it is reasonable to expect that recreational ORV use would increase slightly but would remain below 100 visitor days annually. Four miles of road associated with mineral development in the northern end of the WSA are expected to be constructed in the future.

The entire WSA would be open for other recreation activities, including hunting with its associated horseback riding and camping, photography, and sightseeing. No recreation facilities or developed trails exist in the WSA and none are planned. However, the four miles of road associated with mineral development would be used by hunters to gain access to the northern portion of the WSA. Recreational use for these activities would remain below 50 visitor days for the next 10 years. Projections beyond the 15- to 20-year planning cycle indicate that recreational use for these activities would increase slightly but would remain below 150 visitor days annually for the foreseeable future. All of the WSA's lands inventoried as offering primitive recreational opportunities (3,840 acres) and sixty-nine percent of the lands offering semi-primitive non-motorized opportunities (8,774 acres) would be included in the area managed as roadless.

Mineral Resources Actions

No areas would be withdrawn from mineral entry, but the 12,614 acres of roadless lands would be managed under a "no-surface-occupancy" stipulation. Phosphate mining, renewed gypsum mining, and filing of mining claims would be as described for the proposed action.

No Wilderness/Development Alternative (No Action)

None of the WSA would be recommended for wilderness designation (Map G-3). The entire WSA would be open to resource development. This alternative is depicted in the Lemhi RMP/EIS as a part of Alternatives A, D, and E.

Livestock and Range Actions

Actions would be the same as described for the proposed action.

Recreational Designations and Use Opportunites

All 24,922 acres in the WSA would be designated as open to ORV use. See the no wilderness/retention alternative for recreational ORV use projections. Four miles of road associated with mineral development in the northern end of the WSA are expected to be constructed in the future.

The entire WSA would be open for other recreation activities, including hunting, horseback riding, camping, photography, and sightseeing. Recreational use for these activities would remain below 50 visitor days for the next 10 years. Projections beyond the 15- to 20-year planning cycle indicate that recreational use for these activities would increase slightly but would remain below 100 visitor days annually for the foreseeable future. No recreation facilities or developed trails exist in the WSA and none are planned; however, four miles of road associated with mineral development would be used by hunters to gain access to the northern portion of the WSA.

No lands within the WSA would be managed for primitive or semi-primitive nonmotorized recreational opportunities.

Mineral Resources Actions

Projected minerals actions would be the same as described for the proposed action. No areas would be withdrawn or managed under a no-surface-occupancy stipulation.

All Wilderness Alternative

All 24,922 acres of the WSA would be recommended for wilderness designations (Map G-3). This alternative is depicted in the Lemhi RMP/EIS as a part of Alternative C.

Livestock and Range Actions

See the proposed action for a description of projected livestock and range actions.

Recreational Designations and Use Opportunities

The area would be closed to all ORV use except that required for the maintenance of livestock facilities or operations. An estimated 25 visitor days of recreational ORV use presently occur in the area.

The entire WSA would be open for other recreation activities including hunting, horseback riding, camping, photography, and sightseeing. Recreational use for these activities would remain below 100 visitor days for the next 10 years. Projections beyond the 15- to 20-year planning cycle indicate that recreational use for these activities would increase slightly but would remain below 250 visitor days annually for the foreseeable future.

No recreation facilities or developed trails exist in the WSA and none are planned. All of the lands currently offering primitive or semi-primitive nonmotorized recreational opportunities would be managed to retain these settings.

Mineral Resource Actions

The lands in the WSA would be withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws.

Partial Wilderness/Retention Alternative

The same 14,796 acres recommended for wilderness designation under the proposed action would be recommended under this alternative (see Map G-3). The remaining 10,126 acres located in the northern end of the WSA would not be recommended for wilderness designation. Of the 10,126 nonwilderness acres, 6,100 acres would be open for multiple use management and development, while the remaining 4,026 acres would be closed to vehicular use and managed to retain the existing semi-primitive nonmotorized recreational opportunity settings. This alternative is depicted in the Lemhi RMP/EIS as a part of Alternative B.

Livestock and Range Actions

Actions would be the same as described for the proposed action.

Recreational Designations and Use Opportunities

Within the WSA 6,100 acres would remain open to ORV use; 18,822 acres would be closed. See the proposed action for recreational ORV use projections. Three miles of road associated with mineral development in the northern end of the WSA are expected to be constructed in the future.

Recreation activities and use levels would be as described for the proposed action. Future recreational use would probably be oriented towards the designated wilderness area rather than the lands managed for nonwilderness uses.

No recreation facilities or developed trails exist in the WSA and none are planned. However, the three miles of road associated with mineral development would be used by hunters to gain access to the northern portion of the WSA.

All of the WSA's lands offering primitive or semi-primitive nonmotorized recreational opportunities would be retained in their existing condition through vehicle use closures and future development restrictions (see Minerals).

Mineral Resource Actions

It is assumed that phosphate mining would occur on 700 acres located outside of the semi-primitive nonmotorized area and would involve one mile of road construction between Tenmile Creek and Dry Canyon. Other mineral activities would be as described for the proposed action.

The 14,796 acres recommended for wilderness would be withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws upon designation by Congress.

TABLE G-1
COMPARATIVE IMPACT SUMMARY

ENVIRONMENTAL ISSUE	PROPOSED ACTION: PARTIAL WILDERNESS/ DEVELOPMENT	NO WILDERNESS/RETENTION	NO WILDERNESS/ DEVELOPMENT	ALL WILDERNESS	PARTIAL WILDERNESS/ RETENTION
Wilderness Values	Wilderness values would be adversely affected on 10 percent (2,470 acres) and retained on 59 percent (14,796 acres) of the WSA. Wilderness values on 31 percent (7,656 acres) would be subject to loss, but no adverse activities are presently anticipated.	Wilderness values would be adversely affected on 10 percent (2,470 acres) of the WSA. Wilderness values on 90 percent (22,452 acres) would be subject to loss, but no adverse activities are anticipated.	Wilderness values would be adversely affected on 10 percent (2,470 acres) of the WSA. Wilderness values on 90 percent (22,452 acres) would be subject to loss, but no adverse activities are anticipated.	Wilderness values would be maintained on all 24,922 acres of the WSA. Impacts to solitude and naturalness would not occur on 2,470 acres.	Wilderness values would be adversely affected on 5 percent (1,200 acres) and retained on 59 percent (14,796 acres) of the WSA. Wilderness values on 36 percent (8,926 acres) of the WSA would be subject to loss, but no adverse activities are anticipated.
Exploration for and Development of Mineral Resources	A total of 10,126 acres with moderate to high mineral resource potential would be open to exploration and development; 14,796 acres would be closed to mineral entry. Closed lands would have low mineral potential.	Development of potential mineral resources would not be foregone.	Development of potential mineral resources would not be foregone.	Development of potential mineral resources on 24,922 acres would be foregone.	A total of 10,126 acres with moderate to high mineral resource potential would be open to exploration and development; 14,796 acres would be closed to mineral entry. Closed lands have low mineral potential.
Primitive and Semi-Primitive Nonmotorized Recreation Opportunities	Seventy-six percent (12,614 acres) of the lands offering primitive or semi-primitive nonmotorized opportunities would continue to do so. Opportunities would be lost on 24 percent (4,026 acres) that would be impacted by nearby mining activity.	Seventy-six percent (12,614 acres) of the lands offering primitive or semi-primitive nonmotorized opportunities would continue to do so. Opportunities would be lost on 24 percent (4,026 acres) that would be impacted by nearby mining activity. Long-term loss of all opportunities is possible if mineral development occurs.	In the long-term, all primitive and semi-primitive nonmotorized recreational opportunities would be lost because of gradual proliferation in four-wheel drive tracks and the influence of mining activities.	All primitive (3,840 acres) and semi-primitive nonmotorized (12,800 acres) recreation opportunities would be retained.	All lands offering nonmotorized recreational opportunities would receive special management. Wilderness designation would include 12,614 acres, and 4,026 additional acres would be managed as roadless.
Water Quality	Water quality could be adversely impacted in Tenmile Creek and Clear Creek by mining activity. Sediment levels would exceed Environmental Protection Agency (EPA) standards.	Water quality could be adversely impacted in Tenmile Creek and Clear Creek, depending on the location of mining activity. Sediment levels would exceed EPA standards.	Water quality could be adversely impacted in all perennial streams in the area. In those watersheds where mining occurred, sediment levels would exceed EPA standards.	There would be no adverse impacts to water quality.	Water quality could be adversely impacted depending on the location of mining activity, Tenmile Creek and Clear Creek could have sediment levels exceeding EPA standards.

CHAPTER 3

AFFECTED ENVIRONMENT

Wilderness Values

Naturalness - Eighteenmile Creek WSA is a 24,922-acre unit that stands on its own as a study area. The unit is dominated by 11,141-foot Eighteenmile Peak. The general topography is mountainous, with low hills rising to the Continental Divide's rolling meadows and steep cliffs. Eight major creeks, several valleys, and numerous smaller gulches drain into Eighteenmile Creek to the west.

Vegetation varies from lowland sagebrush-grass communities up through Douglas fir, lodgepole pine, and limber pine to grassy meadows on the divide. Willow-aspen riparian vegetation occupies most creek bottoms. No vegetation manipulations or timber harvest other than some minor fence post and rail cutting has occurred.

Solitude - The WSA provides an outstanding opportunity for solitude due to rugged terrain, vegetative screening, remoteness and limited accessibility. Under ideal conditions of moderate (500 visitor use days per year) and evenly distributed use, opportunities would be of high quality.

With heavy use (more than 500 visitor use days per year), it would be more difficult to isolate oneself from the sights and sounds of others since the steep slopes tend to concentrate use along the creek bottoms. The area currently receives less than 100 visitor use days per year.

Primitive and Unconfined Recreation - The area offers excellent opportunities for backpacking, rockhounding, hunting, wildlife viewing, and cross-country skiing. Use is normally precluded between December and May because access roads are closed by snow.

Special Features - The Continental Divide forms the eastern boundary of the WSA. Congress has designated a Continental Divide National Scenic Trail, but it is doubtful that the actual trail location would be in the WSA since an existing trail system exists nearby in Montana.

Mineral Resources

All surface and subsurface mineral estates in the WSA are in federal ownership and are open to mineral entry. There are no mining claims in the WSA (The Phase I Geology, Energy, and Minerals (GEM) Resource Assessment of the Eighteenmile GRA, prepared by WGM, Inc., is incorrect on this point). Oil and gas leases cover all 24,922 acres (100 percent) of the WSA.

The following discussion is an excerpt from the GEM Phase I report.

Mineral and Energy Economics

"Although the region encompassing the Eighteen Mile GRA is sparsely populated, the existing transportation infrastructure is adequate; thus, given sufficient reserves, grade and reasonable metal and energy prices, development of any metallic mineral or hydrocarbon deposits should not be impeded."

"The rise in the price of silver in the late 1970s spurred considerable exploration interest. U.S. market demand has steadily increased as more industrial uses for silver are found (Rosta, 1982). Silver deposits formerly considered to be low grade are now economically attractive at present prices. Additionally, recoverable silver values in base metal ores, e.g., lead or copper, now make a substantial contribution to mine profits."

"Gypsum which has been mined in the Eighteen Mile GRA is used in two forms: calcined and uncalcined (Appleyard, 1975). About 70% of the gypsum produced in the United States is calcined and is used primarily to produce gypsum wall board (Pressler, 1981). About 70% of the uncalcined gypsum is used in Portland cement, and the remainder is used as a soil conditioner. Gypsum demand is tied to the construction industry which as been depressed in recent years (Lacke, 1982). The price of gypsum averaged $8.53/ton in 1981 (Pressler, 1981)."

"Thorium is used in nuclear reactors, refractories, mantles for incandescent lights, magnesium alloys as a hardener, welding rods, and electronics (Kirk, 1981). A mineral sands operation in Florida is the only thorium producer in the United States. The remainder of U.S. thorium needs are imported or supplied from government stockpiles."

"With the increase in the price of imported oil in the past decades, the deregulation of domestic natural gas prices, and increasing government emphasis on energy self sufficiency, exploration and development of domestic oil and gas resources has proceeded at an accelerated pace. Natural gas reserves discovered in the late 1950s and 1960s in the Montana Disturbed belt were not developed because of a lack of market (Heany, 1961). However, under present conditions drilling is taking place with a goal of near-term production."

"The economic feasibility of geothermal resource development is determined by its distance to market and its temperature. Long-distance transportation of lower temperature geothermal energy is not feasible whereas for electrical grade resources long transportation distances are feasible. Based on present requirements for the use of hot fluids in electrical generating techniques, geothermal systems with temperatures of less than 150°C do not have significant potential for electrical exploration. However, geothermal resources with temperatures less than 150°C do have significant potential for low and intermediate temperature geothermal utilization for space heating, material processing, etc., if their minimum temperature exceeds

40°C. At the lower end of the spectrum, as the energy content of the resource becomes less, or the drilling depth necessary for exploitation becomes greater, there is a very ill-defined cutoff. For example, shallow ground water temperatures on the order of 10-20°C can be used for heat pump applications, and in some cases these are considered geothermal resources. However, in this evaluation, a lower temperature than approximately 40°C is considered uneconomic as a geothermal resource."

LAND CLASSIFICATION FOR GEM RESOURCES POTENTIAL

Explanation of Classification Scheme

"In the following section the land in the Eighteen Mile GRA is classified for geology, energy and mineral (GEM) resources potential. The classification scheme used is shown in Table [G-2]. Use of this system is specified in the contract under which WGM prepared this report.

"The evaluation of resource potential and integration into the BLM classification scheme has been done using a combination of simple subjective and complex subjective approaches (Singer and Mosier, 1981) to regional resources assessment. The simple subjective approach involves the evaluation of resources based on the experience and knowledge of the individuals conducting the evaluations. The complex subjective method involves use of rules, i.e., geologic inference, based on expert opinion concerning the nature and importance of geologic relationship associated with mineral and energy deposits (Singer and Mosier, 1981).

"The GEM evaluation is the culmination of a series of tasks. The nature and order of the tasks was specified by the BLM, however they constitute the general approach by which most resource evaluations of this type are conducted. The sequence of work was: (1) data collections, (2) compilation, (3) evaluation, and (4) report preparation. Two days of field work were done in the Eighteen Mile GRA.

"Each WSA is classified for locatable, leasable, and saleable resources potential.

TABLE G-2

BUREAU OF LAND MANAGEMENT GEM RESOURCES LAND CLASSIFICATION SYSTEM

CLASSIFICATION SCHEME	LEVELS OF CONFIDENCE
1. The geologic environment and the inferred geologic processes do not indicate favorability for accumulation of mineral resources. existence of mineral resources.	A. The available data are either insufficient and/or cannot be considered as direct evidence to support or refute the possible
2. The geologic environment and the inferred geologic processes indicate low favorability for accumulation of mineral resources.	B. The available data provide indirect evidence to support or refute the possible existence of mineral resources.
3. The geologic environment, the inferred geologic processes, and the reported mineral occurrences indicate moderate favorability for accumulation of mineral resources.	C. The available data provide direct evidence, but are quantitatively minimal to support or refute the possible existence of mineral resources.
4. The geologic environment, the inferred geologic processes, the reported mineral occurrences, and the known mines or deposits indicate high favorability for accumulation of mineral resources.	D. The available data provide abundant direct and indirect evidence to support or refute the possible existence of mineral resources.

"Locatable minerals are those which are locatable under the General Mining Law of 1872, as amended, and the Placer Act of 1870, as amended. Minerals which are locatable under these acts include metals, ores of metals, non-metallic minerals such as asbestos, barite, zeolites, graphite, uncommon varieties of sand, gravel, building stone, limestone, dolomite, pumice, pumicite, clay magnesite, silica sand, etc. (Maley, 1983).

"Leasable resources include those which may be acquired under the Mineral Leasing Act of 1920 as amended by the Acts of 1927, 1953, 1970, and 1976. Materials covered under this Act include: asphalt, bitumen, borates of sodium and potassium, carbonates of sodium and potassium, coal, natural gas, nitrates of sodium and potassium, oil, oil shale, phosphate, silicates of sodium and potassium, sulfates of sodium and potassium, geothermal resources, etc. (Maley, 1983).

"Saleable resources include those which may be acquired under the materials Act of 1947 as amended by the Acts of 1955 and 1962. Included under this Act are common varieties of sand, gravel, stone, cinders, pumice, pumicite, clay, limestone, dolomite, peat and petrified wood (Maley, 1983).

CLASSIFICATION OF THE EIGHTEENMILE WILDERNESS STUDY AREA (43-3)

Locatable Resources

"Metallic Minerals. The portion of the Eighteen Mile Wilderness Study Area which is underlain by Paleozoic sedimentary rocks (1a, Map G-6) is classified as having moderate potential for silver-lead-zinc deposits, similar to those in the Nicholia district, based on limited direct evidence (3C). The southern part of the WSA (2a, Map G-6) is classified as having low potential for metallic minerals based on limited direct evidence (2C)."

"Uranium and Thorium. The portion of the Eighteen Mile Wilderness Study Area which is underlain by the Beaverhead pluton (2b, Map G-6) is classified as having moderate potential for thorium and low potential for uranium mineralization based on indirect evidence (3B). The remainder of the WSA (1b, Map G-6) is classified as having moderate favorability for uranium based on indirect evidence (3B). The basis for this classification is the presence of the McGowan Creek formation in either the surface or subsurface within much of the area."

"Non-Metallic Minerals. The portion of the Eighteen Mile Wilderness Study Area which is underlain by rocks of the Big Snowy Formation (2c, Map G-6) is classified as having high favorability for gypsum based on limited direct evidence (4C). The remainder of the WSA (3c, Map G-6) is classified as having low potential for non-metallic minerals based on limited direct evidence (2C)."

Leasable Resources

"Oil and Gas. All of the Eighteen Mile Wilderness Study Area (1a, Map G-7) is classified as having moderate favorability for oil and gas resources based on limited direct evidence (3C). The basis of this classification is the favorable geologic environment coupled with the presence of favorable source rocks and structures."

"Geothermal. The portion of Eighteen Mile Wilderness Study Area (2b, Map G-7) near the mouth of Eighteen Mile Creek is classified as having moderate potential for low temperature geothermal resources based on indirect evidence (3B). The remainder of the WSA (3b, Map G-7) is classified as being unfavorable for low temperature geothermal resources based on indirect evidence (1B). All of the WSA (1b, Map G-7) is classified as being unfavorable for high temperature geothermal resources based on indirect evidence (1B)."

"Sodium and Potassium. The Eighteen Mile Wilderness Study Area (1c, Map G-7) is classified as having low favorability for sodium and potassium resources based on a limited direct evidence (2C). The basis of this classification is the absence of known occurrences of these minerals in the region and the unfavorable overall geologic environment."

"Other. All of the Eighteen Mile Wilderness Study Area (1d, Map G-7) is classified as having low favorability for other leasable resources, including phosphate, bitumen, asphalt, and oil shale, based on limited direct evidence (2C). The basis of the classification is the absence of Phosphoria Formation within the WSA and the absence of known occurrences of other leasable resources in the region."

"Saleable Resources. The portion of the Eighteen Mile Wilderness Study Area which is underlain by Paleozoic carbonate rocks (1, Map G-8) is classified as having high favorability for common varieties of limestone and dolomite based on indirect evidence (4B). The remainder of the WSA is classified as having low favorability for saleable resources based on limited direct evidence (2C)."

Recreation Resources. The WSA contains the only lands in the Lemhi Resource Area offering primitive or semi-primitive nonmotorized recreational opportunities. (See RMP Appendix F for a description of these opportunities.) Primitive opportunities occur on 3,840 acres and semi-primitive nonmotorized opportunities on 12,800 acres. The remaining 8,282 acres offer semi-primitive motorized recreational opportunities. These acres are also roadless but are within an influence zone of roads bordering the WSA.

Recreational off-road vehicle (ORV) use is estimated to be 25 visitor days annually (estimate by BLM staff). Steep terrain and heavy brush limit ORV use on the slopes and ridgelines that occupy 80 percent of the

WSA. Most recreational ORV use occurs along drainage bottoms, primarily along Eighteenmile and Chamberlain creeks, where rough four-wheel-drive tracks exist.

Other dispersed recreational uses, such as hiking, sightseeing, hunting, and camping, occur at a very low level (less than 50 visitor use days per year) throughout the WSA. These uses are confined primarily to the drainage bottoms.

Water Quality. Good water quality (Idaho Department of Health and Welfare standards) characterizes all perennial stream reaches within the WSA. Adverse impacts on water quality at present are the result of livestock use, which increases nonpoint sedimentation and coliform bacteria. These impacts are localized and are presently at acceptable levels.

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

Proposed Action: Partial Wilderness/Development Alternative

The primary impact-producing factor for lands not recommended for wilderness would be the development of mineral resources and the effect of this activity on wilderness values over a long period of time. The primary impact-producing factors for lands recommended for wilderness would be wilderness designation and the subsequent mineral withdrawal.

Impacts on Wilderness Values

None of the wilderness values on 10,126 acres would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated for the next five years.

In the long term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. Prospecting for phosphate is expected to occur on 1,920 acres. Development of a mine is anticipated if an economically feasible discovery is made; known deposits occur just north of the WSA. Two miles of road construction would probably be associated with the phosphate area. The wilderness value of naturalness would be lost on the 1,920 acres. The perception of naturalness would be essentially lost over an additional 200-acre area because the area of phosphate prospecting could be seen.

Renewed mining of gypsum in Clear Creek would impact the perception of naturalness on 300 acres adjacent to the mine. One mile of road construction is anticipated.

For the purpose of this analysis, it is assumed that two discoveries and lode claims would be made between Dry Canyon and Horse Thief Creek. Based on similar developments in the area, construction of one mile of road and surface disturbance on 50 acres is expected.

The wilderness value of naturalness would be adversely impacted on a total of 2,470 acres between Dry Canyon and Horse Thief Creek.

Activities associated with mineral development would also adversely impact the wilderness value of solitude. Sights and sounds from traffic and construction related to mineral development would lower the quality of solitude on 2,470 acres.

Sights and sounds from recreational off-road vehicle (ORV) use would also have an adverse impact on solitude. However, this impact is expected to be negligible compared to mining activities since ORV use is estimated to be less than 25 visitor days annually (estimate by BLM personnel) and is expected to remain below 50 visitor days annually for the next 15 to 20 years.

Wilderness values on 14,796 acres would be protected by legislative mandate. Wilderness designation would withdraw these lands from mineral entry and eliminate the potential for future mineral development. The wilderness values of naturalness and solitude would benefit from this action.

An estimated 15 visitor days annually of ORV use would be eliminated from the wilderness portion of the WSA. It is anticipated that all of this use would move to the nonwilderness portion of the WSA. Although encounters between ORV users and other recreationists are infrequent with current levels of use, the elimination of ORV use would benefit the wilderness value of solitude because visitors would not encounter or hear ORV users in the area. Beneficial effects to naturalness from elimination of ORV use would be negligible since the level of use is already quite low.

Conclusion: Wilderness values would be adversely affected on 10 percent (2,470 acres) and retained on 59 percent (14,796 acres) of the WSA. Wilderness values on 31 percent of the WSA (7,656 acres) would be subject to loss, but no adverse activities are presently anticipated.

Impacts on the Development of Mineral Resources

The nonwilderness 10,126 acres would remain open to mineral leasing and appropriation of minerals under the general mining laws. This area includes most or all of the areas rated as moderately favorable (GEM studies) for silver-lead-zinc and uranium deposits and highly favorable for gypsum and common varieties of limestone and dolomite (Map G-6). The entire WSA is rated as moderately favorable for oil and gas (Map G-7).

Wilderness designation would withdraw 14,796 acres from all forms of mineral entry, subject to valid existing rights. This area was rated as having a low favorability for metallic minerals, uranium, non-metallic minerals, high temperature geothermal, sodium, potassium, and saleable minerals. A small area of the mouth of Eighteenmile Creek was rated moderately favorable for low temperature geothermal resources (Map G-7), while the rest of the WSA was unfavorable. The WSA has a moderate potential for thorium.

Conclusion: The 10,126 acres recommended for nonwilderness have the greatest potential for mineral resources discoveries and would remain open for exploration and development. Mineral potential of the 14,796 acres, which would be withdrawn from mineral entry, is low, based on available data and the geologic environment.

Impacts on Primitive and Semi-Primitive Nonmotorized Recreational Opportunities

Seventy-six percent (12,614 acres) of the lands offering primitive or semi-primitive nonmotorized recreational opportunities would be included in the wilderness portion. This includes all of the primitive area and 69 percent (8,774 acres) of the semi-primitive nonmotorized area. Wilderness designations would maintain the character of these lands by prohibiting the use of vehicles.

The remaining 31 percent (4,026 acres) of the lands offering semi-primitive nonmotorized opportunities is located in the nonwilderness area. These opportunities would be lost because of the presence of roads associated with mining activities (see Recreation Opportunity Spectrum Class Descriptions - RMP Appendix F).

Conclusion: Seventy-six percent (12,614 acres) of the lands offering primitive or semi-primitive nonmotorized recreational opportunities would continue to do so. Opportunities would be lost on 24 percent (4,026 acres) of these lands because of anticipated mining activity.

Impacts on Water Quality

Depending on the type, location, and extent of mining activity, water quality in areas not protected by wilderness designation could be adversely impacted. Tenmile Creek and Clear Creek would be the streams affected.

Maximum sediment levels of 80 to 400 milligrams per liter set by the Environmental Protection Agency (EPA) and the state of Idaho could be exceeded. It is unlikely that these creeks could support a fresh water fishery.

Conclusion: Water quality could be adversely impacted in Tenmile and Clear creeks. Sediment levels would exceed standards set by EPA.

No Wilderness/Retention Alternative

The primary impact-producing factor would be the development of mineral resources and the effect of this activity on wilderness values over a long period of time.

Impacts on Wilderness Values

None of the wilderness values on 24,922 acres would receive the special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated for the next five years.

In the long term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. This alternative's management of 12,614 acres as roadless would help to retain wilderness values on a portion of the area. This acreage would be open to mineral exploration, but operating plans and special stipulations regarding road construction, siting, and rehabilitation would be written to minimize the impacts of mineral activity. No mineral activity is anticipated on these 12,614 acres.

Impacts from phosphate and gypsum mining, development of lode claims, mineral-related traffic and construction, and recreational ORV use would be as described for the proposed action.

Conclusion: Wilderness values would be adversely affected on 10 percent (2,470 acres) of the WSA due to mineral exploration and development. Wilderness values on the other 90 percent (22,452 acres) of the WSA would be subject to loss, but no adverse activities are presently anticipated.

Impacts on the Development of Mineral Resources

All lands within the WSA would remain open for mineral leasing and for appropriation of minerals under the general mining laws. There would be no potential development of mineral resources foregone under this alternative.

Conclusion: Development of potential mineral resources would not be foregone.

Impacts on Primitive and Semi-Primitive Nonmotorized Recreational Opportunities

Seventy-six percent (12,614 acres) of the lands offering primitive or semi-primitive recreational opportunities would retain these opportunities through roadless management. These lands would be closed to recreational ORV use, but this would create no impacts since no ORV use occurs on these lands.

While closed to recreational ORV use, these lands would remain open to mineral exploration and development. This is not expected to have any short-term impact since mineral potential for this area was rated as low (GEM study) and no mineral activities are anticipated. The potential for long-term impacts would be greater as mineral activity moved from the more accessible areas to remote locations in search of new discoveries. Limited mineral exploration activities could be designed to be compatible with these recreational opportunities, but any substantial development would cause their loss.

The remaining 24 percent (4,026 acres) of lands having non-motorized opportunities would be lost because of the presence of roads associated with mining activities (see Recreation Opportunity Spectrum Class Descriptions - RMP Appendix F).

Conclusion: Seventy-six percent (12,614 acres) of the lands offering primitive or semi-primitive nonmotorized recreational opportunities would continue to do so because of a roadless nonwilderness management objective. Opportunities would be lost on 24 percent (4,026 acres) of these lands because of anticipated mining activity. Long-term loss of all opportunities is possible if mineral development occurred.

Impacts on Water Quality

Impacts to water quality in Tenmile and Clear creeks would be as described for the proposed action.

No Wilderness/Development Alternative (No Action)

The primary impact-producing factor for the lands not recommended for wilderness would be the development of mineral resources and the effect of this activity on wilderness values over a long period of time.

Impacts on Wilderness Values

Impacts from phosphate and gypsum mining, development of lode claims, mineral-related traffic and construction, and recreational ORV use would be as described for the no wilderness/retention alternative. However, this alternative would not manage any acreage as roadless to help retain wilderness values.

Impacts on the Development of Mineral Resources

All lands within the WSA would remain open for mineral leasing and for appropriation of minerals under the general mining laws and other pertinent laws and regulations. There would be no potential development of mineral resources foregone under this alternative.

Conclusion: Development of potential mineral resources would not be foregone.

Impacts on Primitive and Semi-Primitive Non-motorized Recreational Opportunities

No attempt would be made to retain the primitive or semi-primitive nonmotorized opportunities which exist in the WSA. All 24,922 acres would be open to ORV use. This is not expected to produce any significant impacts since most of the area would remain impassable to ORVs. The level of use is expected to remain below 50 visitor days annually in the future.

Short-term impacts would be negligible since little change in existing use patterns is anticipated in the next five years. In the long term, the gradual extension of four-wheel drive tracks into the WSA and anticipated mining activities would change the roadless nature of the WSA to such an extreme that no lands would meet the criteria for primitive or semi-primitive nonmotorized opportunity management.

Conclusion: In the long term, all primitive and semi-primitive nonmotorized recreational opportunities would be lost because of a gradual proliferation of four-wheel drive tracks and the influence of mining activities.

Impacts on Water Quality

See the proposed action for a description of water quality impacts.

All Wilderness Alternative

The primary impact-producing factors would be the designation of wilderness, the subsequent withdrawal from mineral entry, and the effect of this withdrawal on mineral development.

Impacts on Wilderness Values

All 24,922 acres of the WSA would be designated wilderness. All wilderness values would be protected by legislative mandate. Wilderness values of naturalness and solitude would benefit from this action because approximately 3,470 acres of the WSA would not be impacted by mineral development activities.

An estimated 25 visitor days annually of ORV use would be eliminated from the WSA by wilderness designation. Although encounters between ORV users are infrequent with current levels of use, the elimination of ORV use would benefit the wilderness value of solitude because visitors would not encounter or hear ORV users in the area. However, beneficial effects to naturalness resulting from the elimination of ORV use would be negligible since the level of use is already quite low.

Conclusion: Wilderness values would be maintained on all 24,922 acres of the WSA. Since development of potential mineral resources would be foregone, impacts to naturalness and solitude would not occur on 2,470 acres that would otherwise be disturbed.

Impacts on the Development of Mineral Resources

Wilderness designation would withdraw all 24,922 acres of public land from all forms of mineral entry, subject to valid existing rights at the time of designation. No mining claims currently exist in the WSA. The GEM studies indicated that there were areas within the WSA rated moderately favorable for discovery of silver-lead-zinc deposits, uranium, oil and gas, thorium, and low temperature geothermal resources. Other areas were rated as highly favorable for gypsum and common varieties of limestone and dolomite (see Maps G-6, G-7, and G-8). No estimates of mineral reserves were made.

Conclusion: Development of potential mineral resources on 24,922 acres would be foregone.

Impacts on Primitive and Semi-Primitive Non-Motorized Recreational Opportunties

Wilderness designation would ensure that existing primitive and semi-primitive nonmotorized recreational opportunities remained intact through the prohibition of vehicular use, road construction, or any other use which would alter the existing naturalness and roadless character of the WSA. Within the wilderness, 3,840 acres would offer primitive opportunities and 12,800 acres would offer semi-primitive nonmotorized opportunities. The remaining 8,282 acres in the WSA would be closed to vehicular use but would remain classified as semi-primitive motorized because of the influence of nearby roads.

Conclusion: All primitive (3,840 acres) and semi-primitive nonmotorized (12,800 acres) recreational opportunities would be retained.

Impacts on Water Quality

The localized non-point sources of sediment and coliform bacteria associated with livestock use would remain unchanged, but this would not be a significant impact. Beneficial impacts to water quality from the elimination of ORV use would be negligible since the level of use would have been quite low (25 to 100 visitor days annually). Withdrawing the WSA from mineral entry would protect water quality in Tenmile and Clear creeks.

Conclusion: There would be no adverse impacts to water quality.

Partial Wilderness/Retention Alternative

The primary impact-producing factor for the lands not recommended for wilderness would be the development of mineral resources and the effect of these activities on wilderness values over a long period of time. For the lands recommended for wilderness, the primary impact-producing factors would be wilderness designation and the subsequent mineral withdrawal.

The primary difference between this alternative and the proposed action is that 4,026 of the 10,126 nonwilderness acres would be managed as roadless. Other differences from the proposed action are a reduced acreage for phosphate mining and the preservation of semi-primitive nonmotorized recreational opportunities.

Impacts on Wilderness Values

None of the wilderness values on 10,126 acres would receive special legislative protection provided by wilderness designation. The short-term impact of this action would be negligible since little development activity is anticipated for the next five years.

In the long term, wilderness values are expected to suffer adverse impacts or be lost because of mineral exploration and development. However, management of 4,026 acres as roadless would help to retain wilderness values on a portion of the area. This acreage would be open to mineral exploration, but operating plans and special stipulations regarding road construction, siting, and rehabilitation would be written to minimize the impacts of mineral activity.

Prospecting for phosphate is expected to occur on 700 acres, with development of a mine being likely if an economically feasible discovery was made. Known deposits occur just north of the WSA. Two miles of road construction would probably be associated with the phosphate area. The wilderness value of naturalness would be lost on the 700 acres. The perception of naturalness would be impacted and essentially lost over an additional 200-acre area because the area of phosphate prospecting could be seen.

Impacts from gypsum mining and development of lode claims would be as described for the proposed action.

The wilderness value of naturalness would be adversely impacted on a total of 1,200 acres located between Dry Canyon and Horse Thief Creek.

Activities associated with mineral development would also adversely impact the wilderness value of solitude. Sights and sounds from traffic and construction related to mineral development would lower the quality of solitude on 1,200 acres.

See the proposed action for impacts resulting from recreational ORV use and wilderness designation.

Conclusion: Wilderness values would be adversely affected on 5 percent (1,200 acres) and retained on 59 percent (14,796 acres) of the WSA. Wilderness values on 36 percent of the WSA (8,926 acres) would be subject to loss, but no adverse activities are presently anticipated.

Impacts on the Development of Mineral Resources

Effects on the development of mineral resources would be as described for the proposed action.

Impacts on Primitive and Semi-Primitive Non-motorized Recreational Opportunities

All of the lands offering primitive or semi-primitive nonmotorized recreational opportunities would receive special management emphasis (either as designated wilderness or through roadless recreation management).

Seventy-six percent (12,614 acres) of the lands offering primitive or semi-primitive nonmotorized recreational opportunities would be included in the wilderness portion. This includes all of the primitive area and 69 percent (8,774 acres) of the semi-primitive nonmotorized area. Wilderness designation would retain the character of these lands by prohibiting the use of vehicles.

The remaining 31 percent (4,026 acres) of the semi-primitive nonmotorized opportunities is located in the nonwilderness area. These opportunities would be retained through recreation management of the 4,026 acres as roadless. While closed to recreational ORV use, these lands would be open to mineral exploration and development. This is not expected to have any short-term impact, but the potential for long-term impacts would be greater as mineral activity moved from the more accessible areas to remote locations in search of new discoveries.

Conclusion: All lands offering primitive or semi-primitive nonmotorized recreational opportunities would receive special management. Wilderness designation would include 12,614 acres, while 4,026 acres would be managed as roadless.

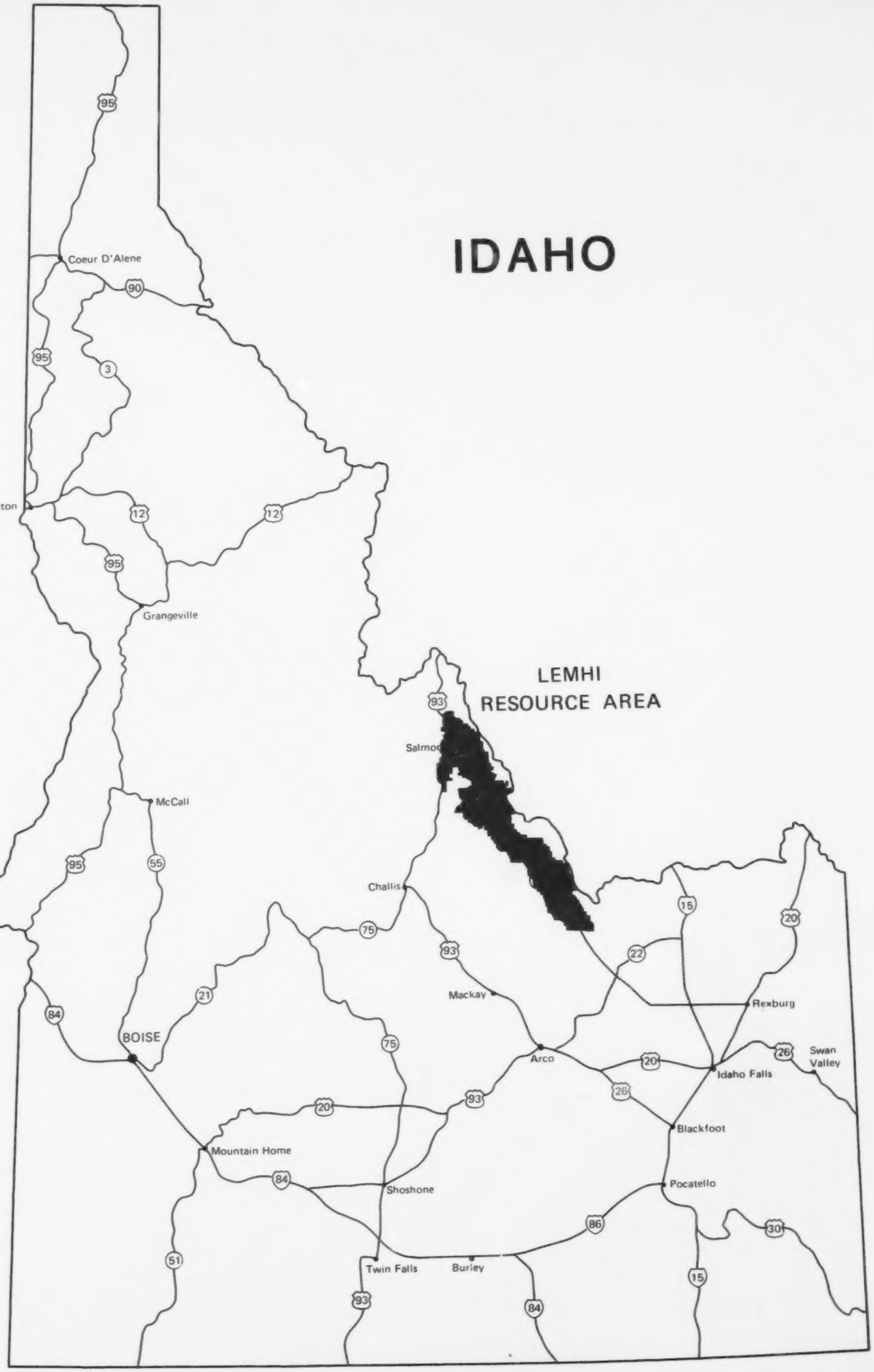
Impacts on Water Quality

See the proposed action for a description of impacts to water quality.

CHAPTER 5

CONSULTATION AND COORDINATION

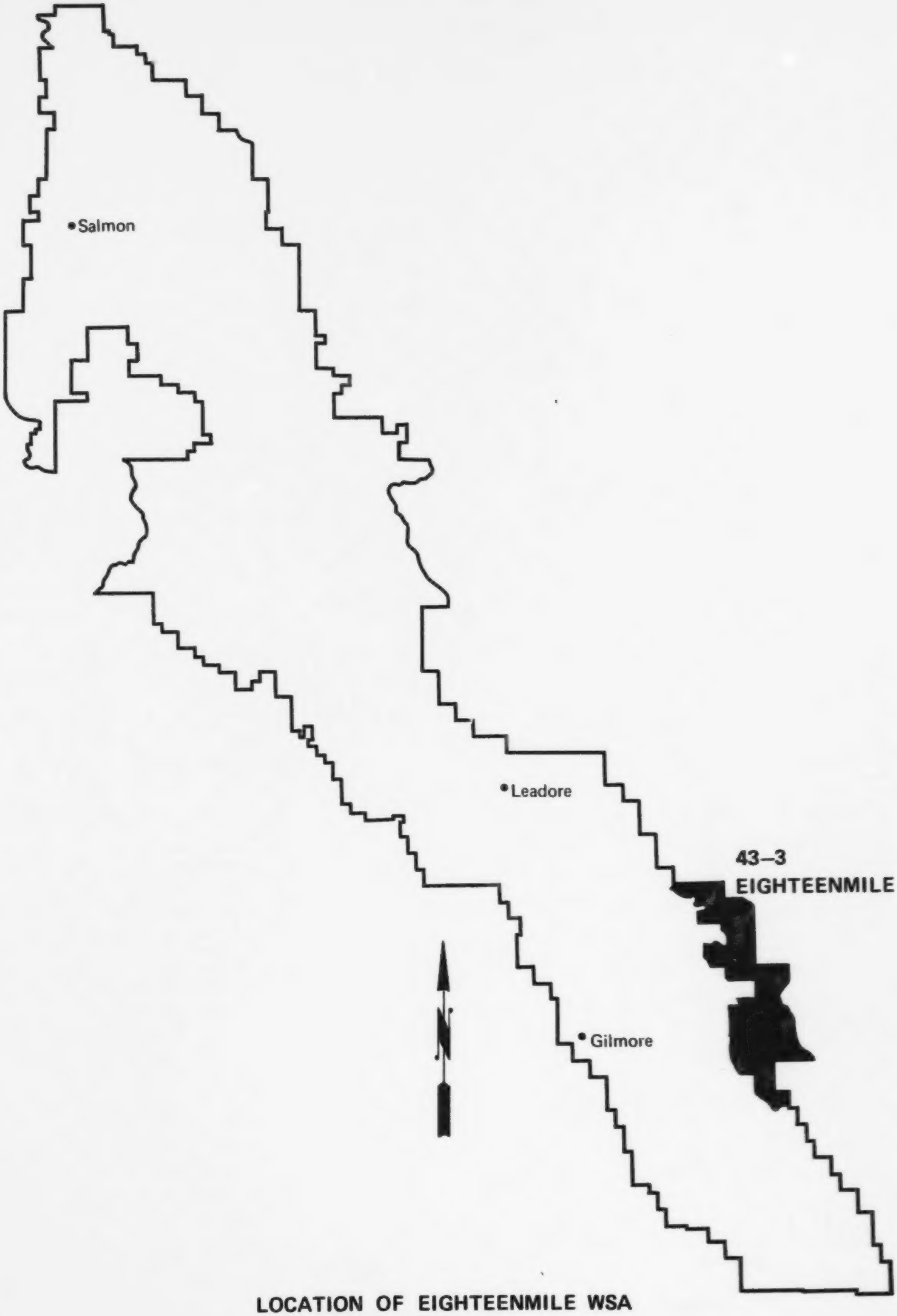
Refer to the Lemhi RMP/EIS, Part II, Chapter 5, for a description of the consultation and coordination completed.


IDAHO
LEMHI
RESOURCE AREA
Coeur D'Alene
Lewiston
Grangeville
McCall
BOISE
Mountain Home
Twin Falls
Burley
Shoshone
Pocatello
Blackfoot
Idaho Falls
Rexburg
Swan Valley
Arco
Mackay
Challis
Salmon
95
90
3
12
55
21
84
75
93
20
26
22
15
86
30
51

GENERAL LOCATION MAP

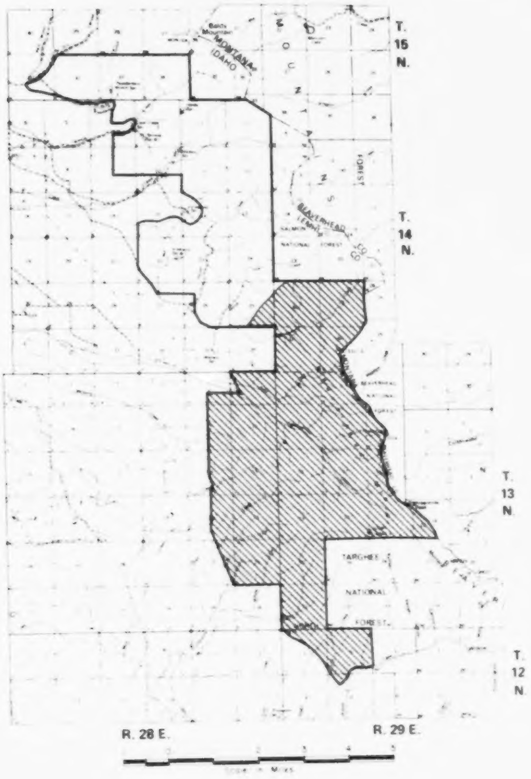
MAP G–1

READEX FICHE


Salmon
Leadore
Gilmore
43–3
EIGHTEENMILE
N

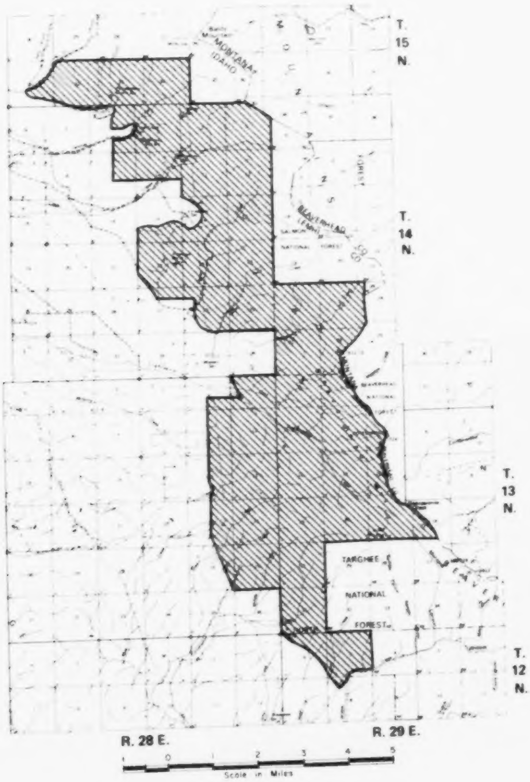
LOCATION OF EIGHTEENMILE WSA

MAP G–2



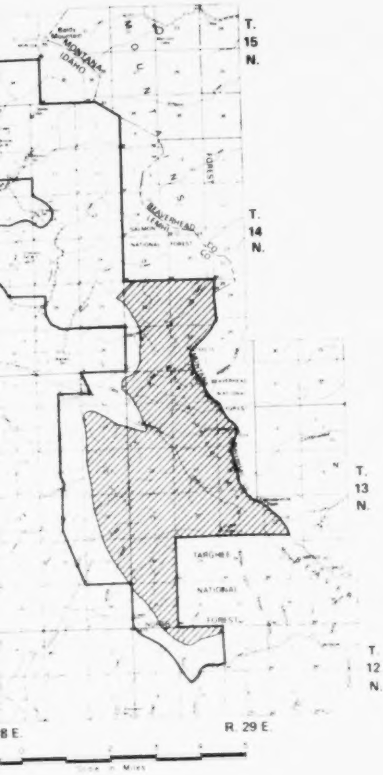
Baldy Mountain
MONTANA
IDAHO
BEAVERHEAD NATIONAL FOREST
SALMON NATIONAL FOREST
TARGHEE NATIONAL FOREST
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
R. 28 E.
R. 29 E.
1 0 1 2 3 4 5
Scale in Miles

Proposed Action
Partial Wilderness / Development

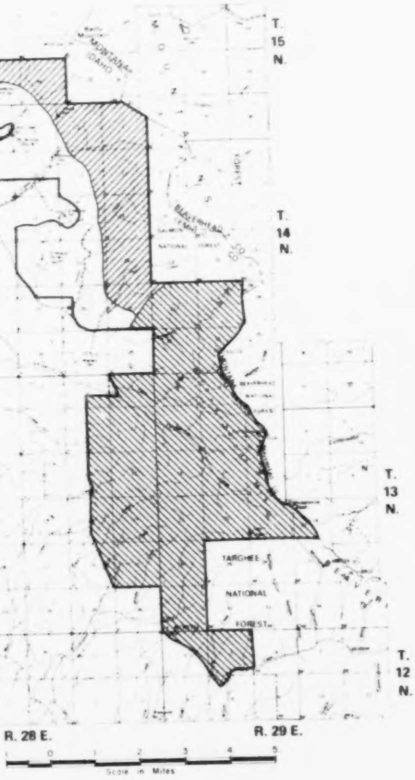


Baldy Mountain
MONTANA
IDAHO
BEAVERHEAD NATIONAL FOREST
SALMON NATIONAL FOREST
TARGHEE NATIONAL FOREST
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
R. 28 E.
R. 29 E.
1 0 1 2 3 4 5
Scale in Miles

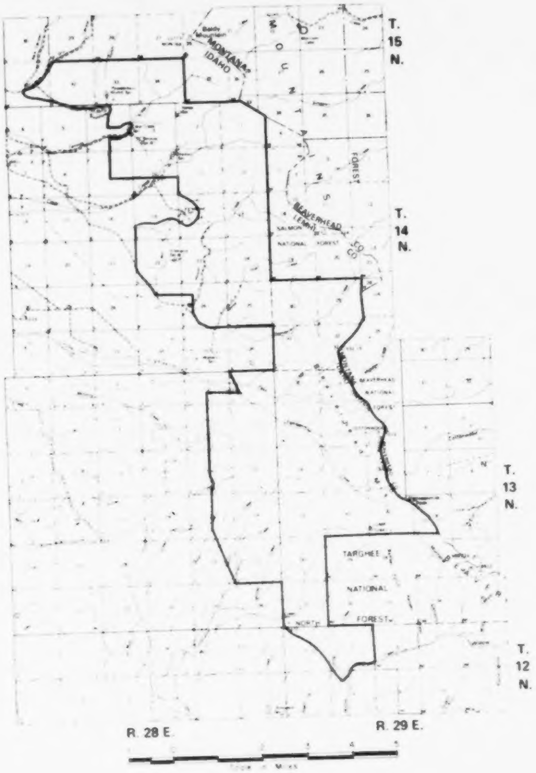
All Wilderness


T. 15 N.
MONTANA
IDAHO
BEAVERHEAD
SALMON NATIONAL FOREST
T. 14 N.
T. 13 N.
TARGHEE NATIONAL FOREST
T. 12 N.
R. 29 E.
Scale in Miles

o Wilderness / Retention


T. 15 N.
MONTANA
IDAHO
BEAVERHEAD
SALMON NATIONAL FOREST
T. 14 N.
T. 13 N.
TARGHEE NATIONAL FOREST
T. 12 N.
R. 28 E.
R. 29 E.
Scale in Miles

Partial Wilderness / Retention


T. 15 N.
MONTANA
IDAHO
BEAVERHEAD
SALMON NATIONAL FOREST
T. 14 N.
T. 13 N.
TARGHEE NATIONAL FOREST
T. 12 N.
R. 28 E.
R. 29 E.
Scale in Miles

No Wilderness / Development

ALTERNATIVE MAPS

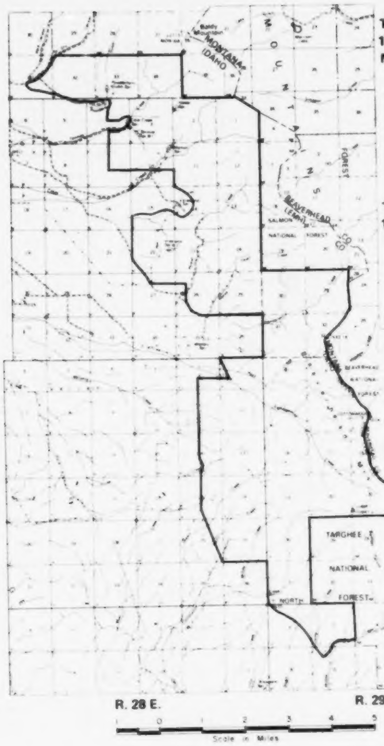
Wilderness

▧

Nonwilderness

☐ Open for Development

▨ Roadless Management


Baldy Mountain
MONTANA
IDAHO
M
O
U
N
T
A
I
N
S
FOREST
BEAVERHEAD
(LEMHI)
SALMON
NATIONAL FOREST
CO.
CO.
BEAVERHEAD
NATIONAL
FOREST
TARGHEE
NATIONAL
FOREST
NORTH
R. 28 E.
R. 29
1
0
1
2
3
4
5
Scale in Miles

No Wilderness / Development

ALTERNATIVE MAPS

Wilderness

▨

Nonwilderness

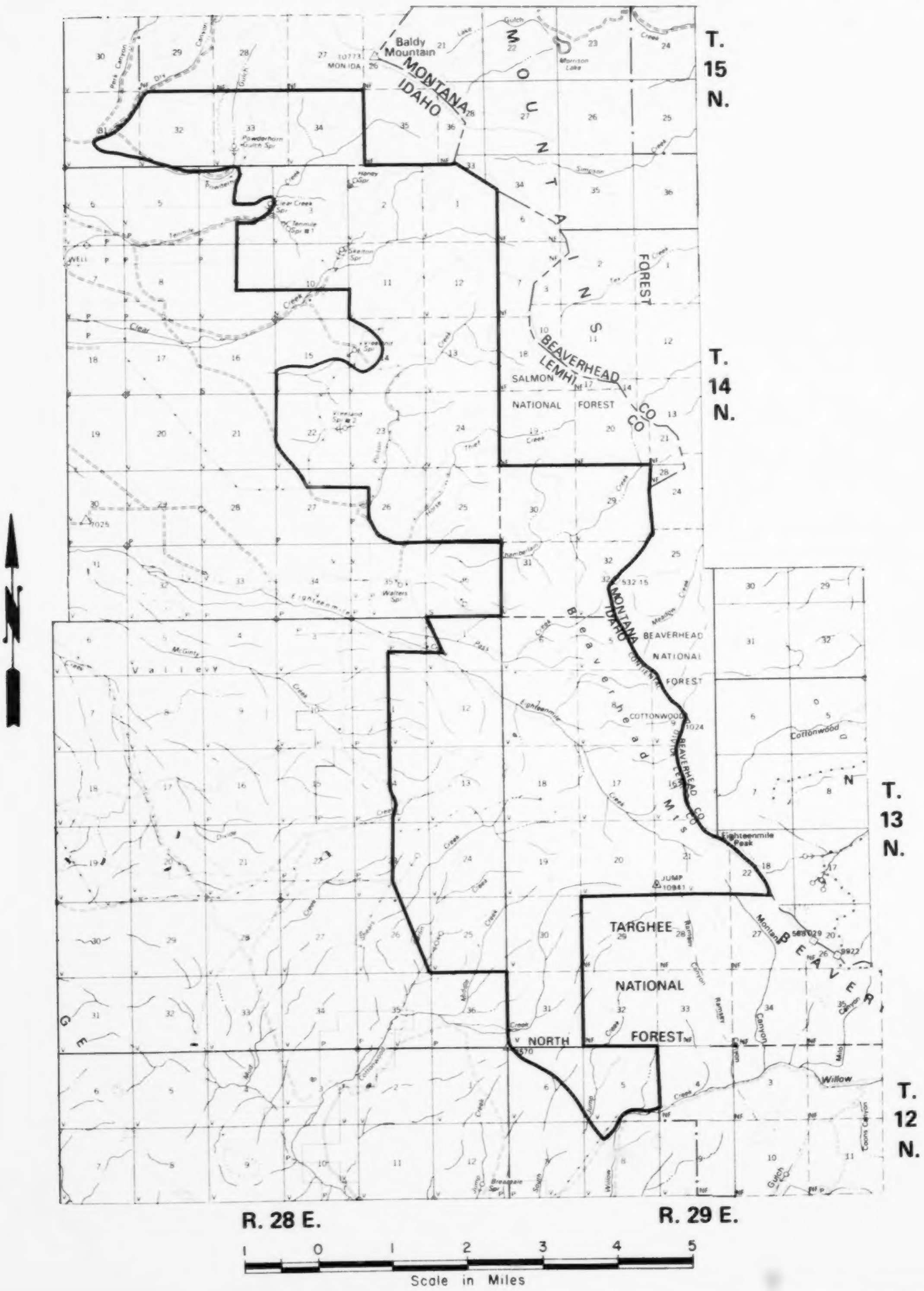
☐ Open for Developm

▨ Roadless Manageme

MAP G–3

EIGHTEENMILE WSA

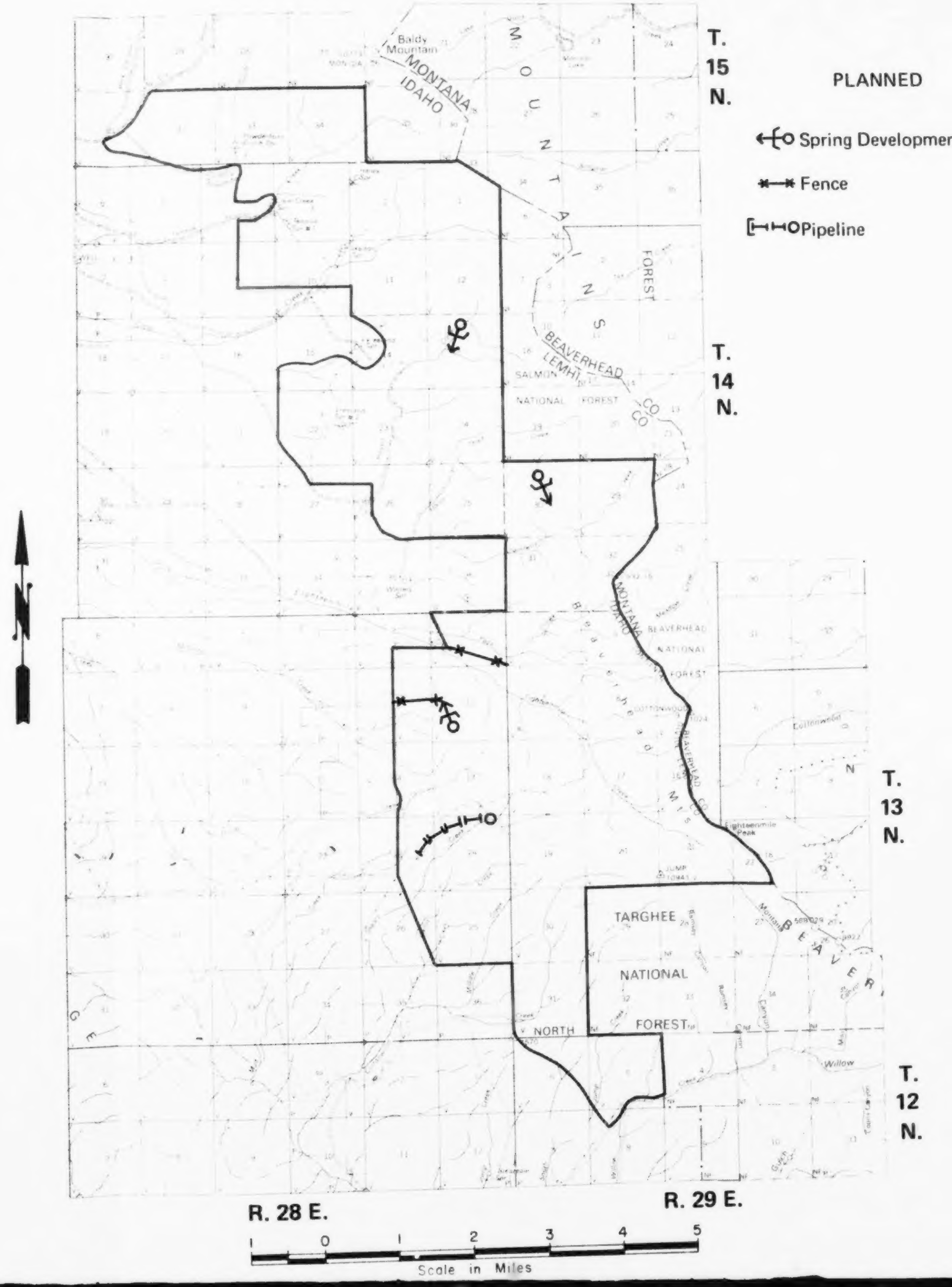
PROPOSED ACTION and ALTERNATIVE



T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
R. 28 E.
R. 29 E.
Baldy Mountain
MONTANA
IDAHO
MOUNTAINS
FOREST
BEAVERHEAD
LEMHI
CO
SALMON
NATIONAL FOREST
Beaverhead Mts
BEAVERHEAD NATIONAL FOREST
COTTONWOOD
Eighteenmile Peak
JUMP
TARGHEE NATIONAL FOREST
NORTH
Clear Creek
Eighteenmile
Valley
Willow
Scale in Miles
1 0 1 2 3 4 5

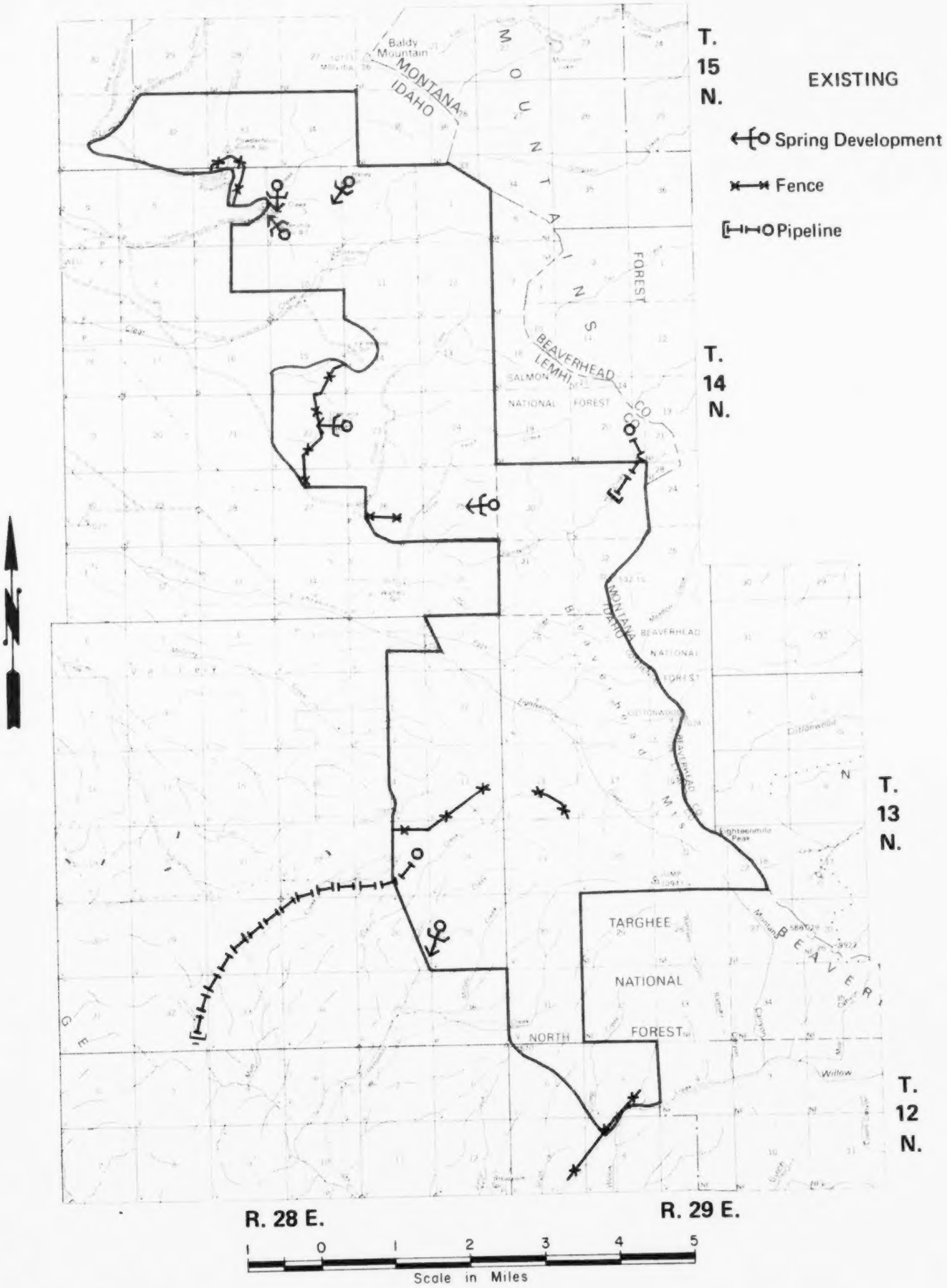
MAP

EXISTING and PLANNED R


PLANNED
Spring Developmen
Fence
Pipeline
Baldy Mountain
MONTANA
IDAHO
MOUNTAINS
FOREST
BEAVERHEAD
LEMHI
CO
CO
SALMON
NATIONAL FOREST
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
MONTANA
IDAHO
BEAVERHEAD
NATIONAL
FOREST
Beaverhead Mts
BEAVERHEAD CO
Eighteenmile Peak
JUMP
TARGHEE
NATIONAL
FOREST
NORTH
BEAVER
Cottonwood
Willow
R. 28 E.
R. 29 E.
1
0
1
2
3
4
5
Scale in Miles

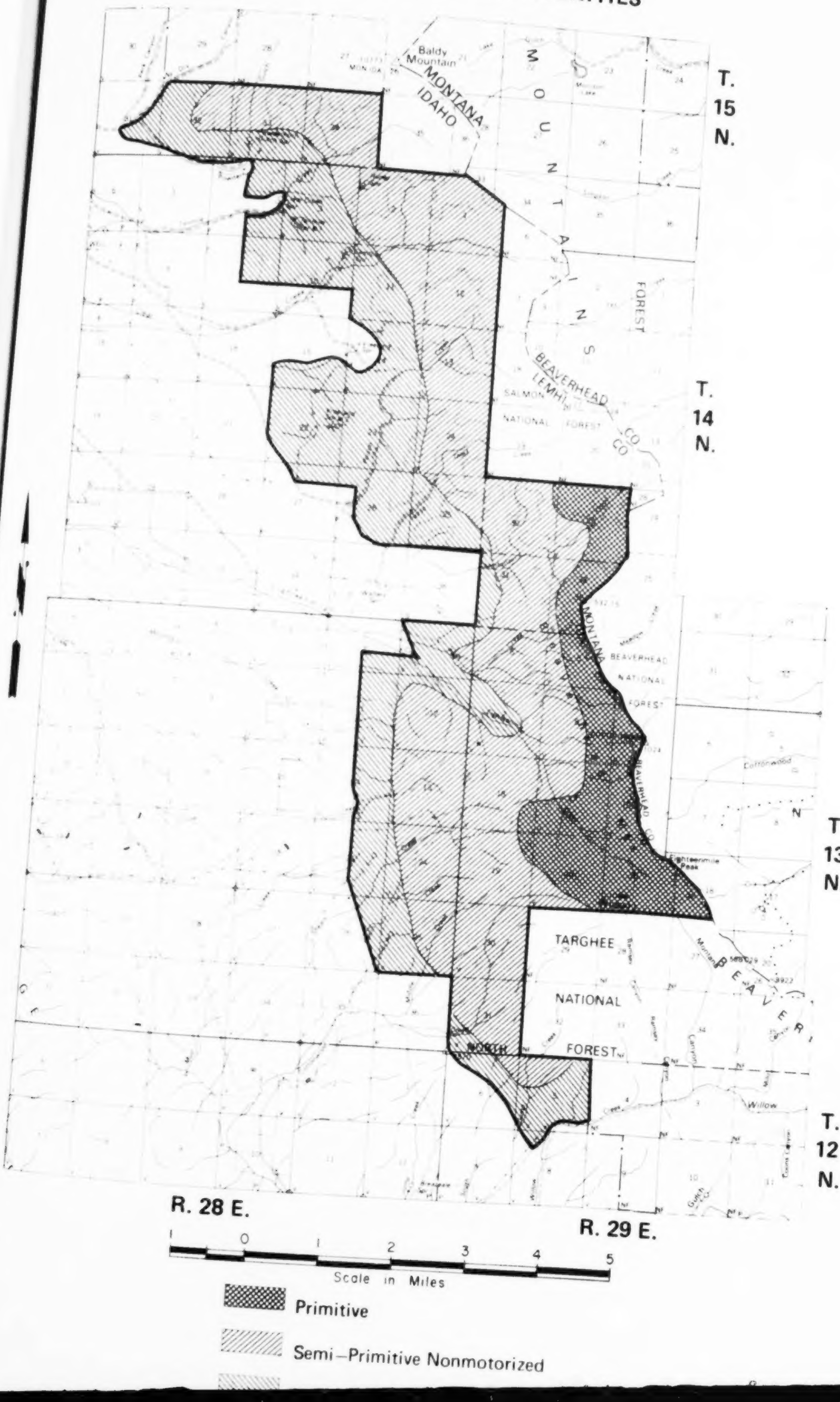
-4

ANGE IMPROVEMENTS


T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
R. 28 E.
R. 29 E.
EXISTING
Spring Development
Fence
Pipeline
Baldy Mountain
MONTANA
IDAHO
MOUNTAINS
FOREST
BEAVERHEAD
LEMHI
CO.
SALMON
NATIONAL FOREST
BEAVERHEAD NATIONAL FOREST
Eighteenmile Peak
TARGHEE NATIONAL FOREST
NORTH
Willow
BEAVER
1 0 1 2 3 4 5
Scale in Miles

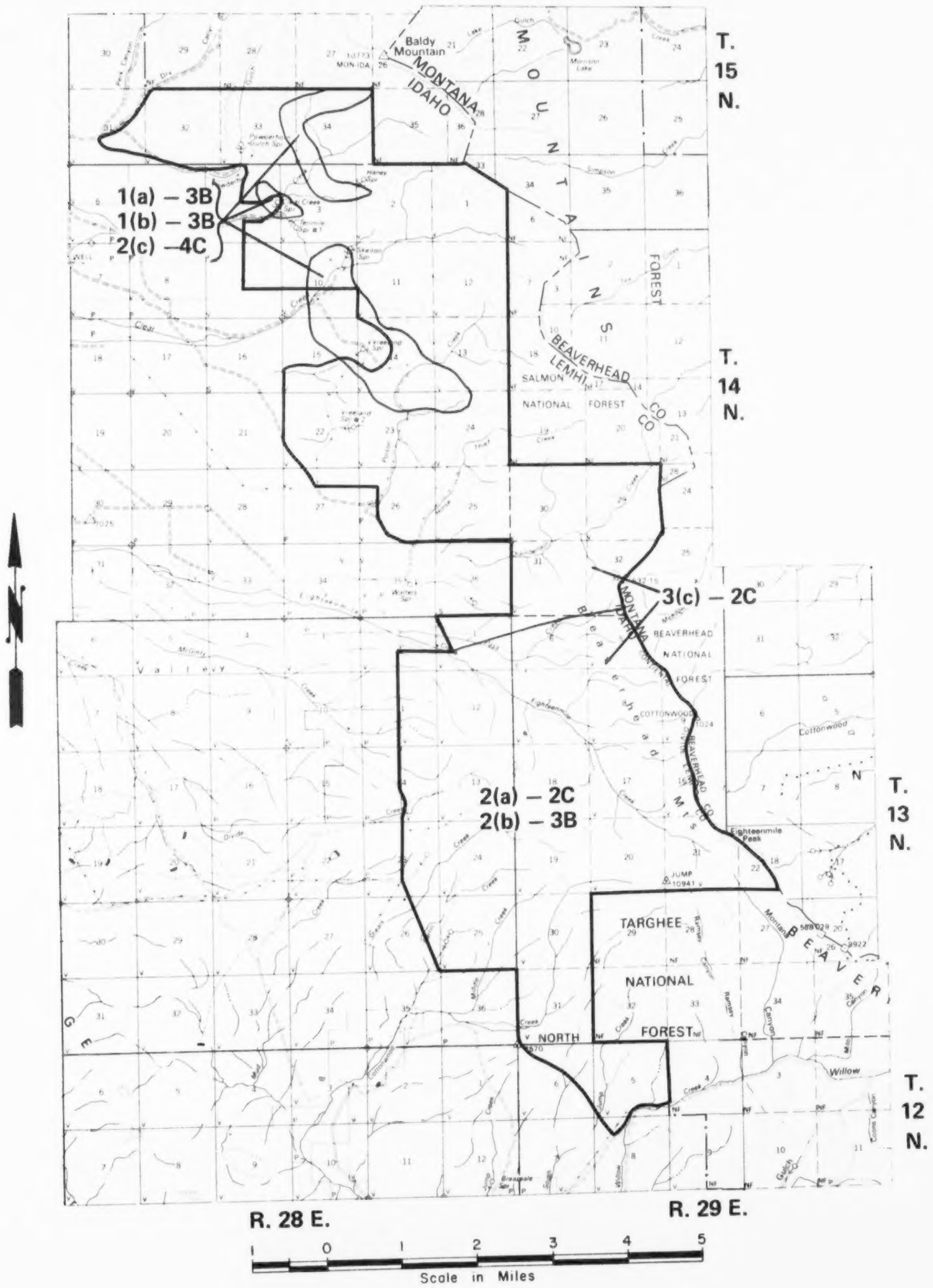
MAP G–5

RECREATION OPPORTUNITIES


Baldy Mountain
MONTANA
IDAHO
MOUNTAINS
FOREST
BEAVERHEAD CO.
LEMHI CO.
SALMON NATIONAL FOREST
MONTANA
BEAVERHEAD NATIONAL FOREST
BEAVERHEAD CO.
Eighteenmile Peak
Cottonwood
TARGHEE NATIONAL FOREST
NORTH
BEAVER
Willow
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
R. 28 E.
R. 29 E.
1 0 1 2 3 4 5
Scale in Miles
Primitive
Semi–Primitive Nonmotorized

MAP G–6

LOCATABLE MINERALS LAND CLASSIFICATION


Baldy Mountain
MONTANA
IDAHO
MOUNTAINS
FOREST
T. 15 N.
1(a) – 3B
1(b) – 3B
2(c) –4C
BEAVERHEAD
LEMHI
CO
SALMON NATIONAL FOREST
T. 14 N.
3(c) – 2C
MONTANA
IDAHO
BEAVERHEAD NATIONAL FOREST
Valley
2(a) – 2C
2(b) – 3B
T. 13 N.
TARGHEE NATIONAL FOREST
NORTH
BEAVER
T. 12 N.
R. 28 E.
R. 29 E.
1 0 1 2 3 4 5
Scale in Miles
N

BLM LAND CLASSIFICATION SYSTEM FOR GEM RESOURCES

CLASSIFICATION SCHEME

1. THE GEOLOGIC ENVIRONMENT AND THE INFERRED GEOLOGIC PROCESSES DO NOT INDICATE FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

2. THE GEOLOGIC ENVIRONMENT AND THE INFERRED GEOLOGIC PROCESSES INDICATE LOW FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

3. THE GEOLOGIC ENVIRONMENT, THE INFERRED GEOLOGIC PROCESSES, AND THE REPORTED MINERAL OCCURRENCES INDICATE MODERATE FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

4. THE GEOLOGIC ENVIRONMENT, THE INFERRED GEOLOGIC PROCESSES, THE REPORTED MINERAL OCCURRENCES, AND THE KNOWN MINES OR DEPOSITS INDICATE HIGH FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

LEVELS OF CONFIDENCE

A. THE AVAILABLE DATA ARE EITHER INSUFFICIENT AND/OR CANNOT BE CONSIDERED AS DIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES WITHIN THE RESPECTIVE AREA.

B. THE AVAILABLE DATA PROVIDE INDIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

C. THE AVAILABLE DATA PROVIDE DIRECT EVIDENCE, BUT ARE QUANTITATIVELY MINIMAL TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

D. THE AVAILABLE DATA PROVIDE ABUNDANT DIRECT AND INDIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

EXPLANATION

Area I.D. Number ↘ 1(a) – 4D ↙ Level of Confidence

Commodity ↗ ↖ Classification

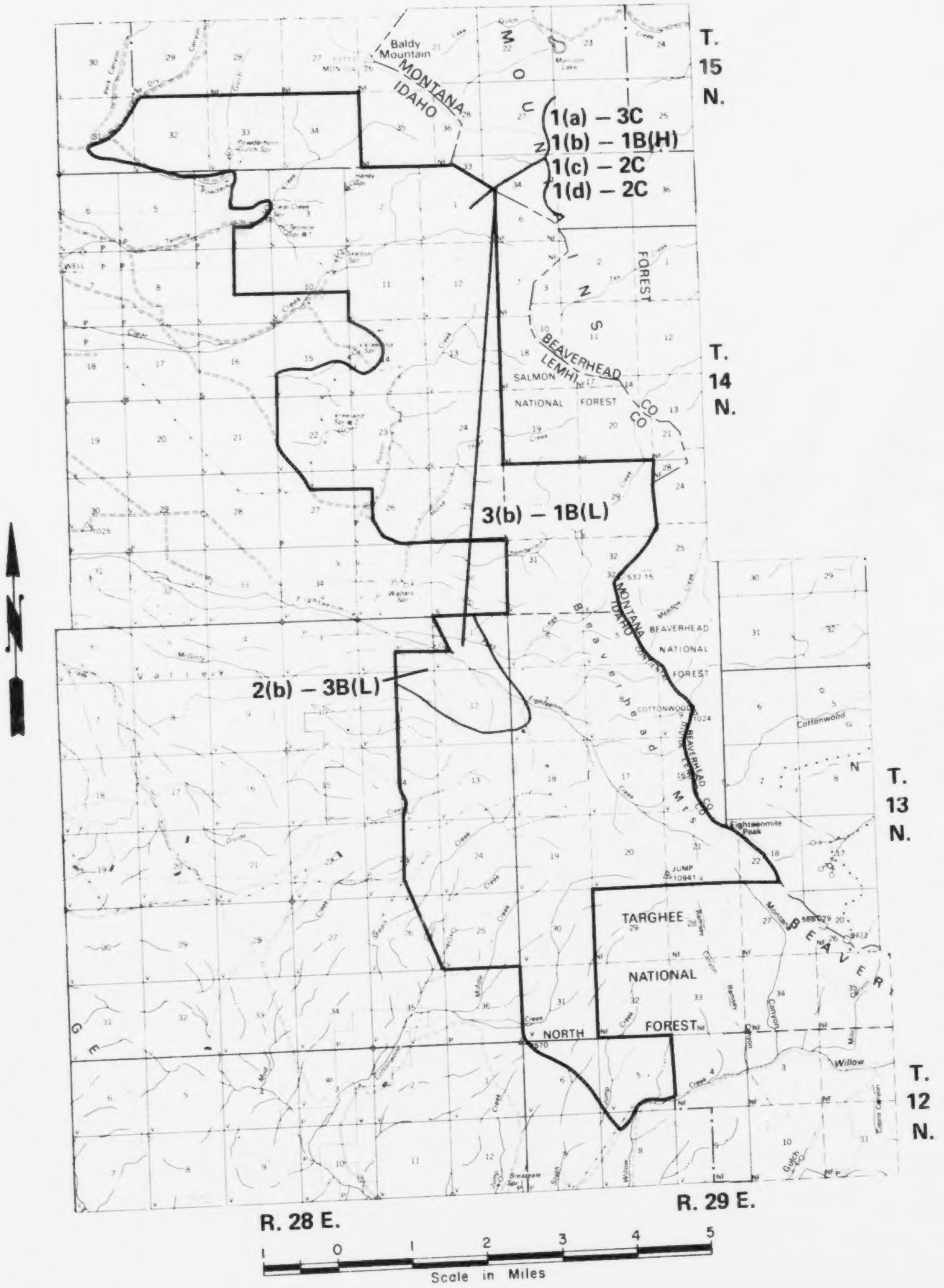
a) Metallic Minerals

b) Uranium and Thorium

c) Non–Metallic Minerals

MAP G–7

LEASABLE MINERALS LAND CLASSIFICATION


T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
R. 28 E.
R. 29 E.
Baldy Mountain
MONTANA
IDAHO
MOUNTAINS
FOREST
BEAVERHEAD
LEMHI
CO
CO
SALMON
NATIONAL FOREST
BEAVERHEAD
NATIONAL
FOREST
TARGHEE
NATIONAL
FOREST
NORTH
Cottonwood
Willow
Eighteenmile Peak
JUMP
1(a) – 3C
1(b) – 1B(H)
1(c) – 2C
1(d) – 2C
3(b) – 1B(L)
2(b) – 3B(L)
N
1 0 1 2 3 4 5
Scale in Miles

BLM LAND CLASSIFICATION SYSTEM FOR GEM RESOURCES

CLASSIFICATION SCHEME

1. THE GEOLOGIC ENVIRONMENT AND THE INFERRED GEOLOGIC PROCESSES DO NOT INDICATE FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

2. THE GEOLOGIC ENVIRONMENT AND THE INFERRED GEOLOGIC PROCESSES INDICATE LOW FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

3. THE GEOLOGIC ENVIRONMENT. THE INFERRED GEOLOGIC PROCESSES, AND THE REPORTED MINERAL OCCURRENCES INDICATE MODERATE FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

4. THE GEOLOGIC ENVIRONMENT. THE INFERRED GEOLOGIC PROCESSES, THE REPORTED MINERAL OCCURRENCES, AND THE KNOWN MINES OR DEPOSITS INDICATE HIGH FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

LEVELS OF CONFIDENCE

A. THE AVAILABLE DATA ARE EITHER INSUFFICIENT AND/OR CANNOT BE CONSIDERED AS DIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES WITHIN THE RESPECTIVE AREA.

B. THE AVAILABLE DATA PROVIDE INDIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

C. THE AVAILABLE DATA PROVIDE DIRECT EVIDENCE, BUT ARE QUANTITATIVELY MINIMAL TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

D. THE AVAILABLE DATA PROVIDE ABUNDANT DIRECT AND INDIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

EXPLANATION

Area I.D. Number ↘1(a) – 4D↙ Level of Confidence

Commodity↗ ↖Classification

a) Oil and Gas

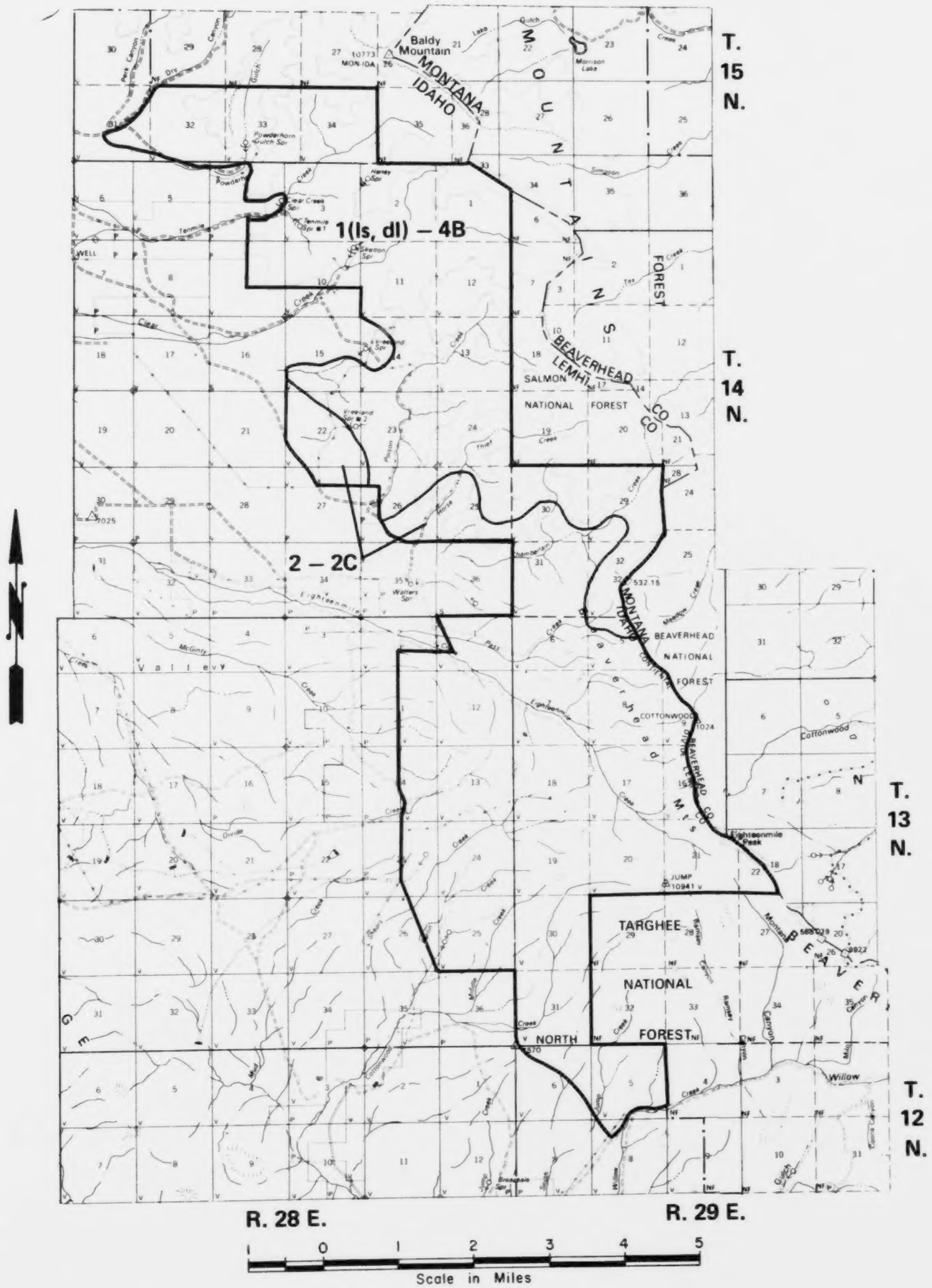
b) Geothermal: High temperature (H), Low temperature (L)

c) Sodium and Potassium

d) Others: Asphalt (As), bitumen (bt), phosphate (ph). No specific commodity designation indicates that the rating applies to all of the above.

MAP G–8

SALEABLE MINERALS LAND CLASSIFICATION


1(ls, dl) – 4B
2 – 2C
Baldy Mountain
MONTANA
IDAHO
MOUNTAINS
BEAVERHEAD CO
LEMHI CO
SALMON NATIONAL FOREST
BEAVERHEAD NATIONAL FOREST
TARGHEE NATIONAL FOREST
NORTH
BEAVER
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
R. 28 E.
R. 29 E.
N
1 0 1 2 3 4 5
Scale in Miles

BLM LAND CLASSIFICATION SYSTEM FOR GEM RESOURCES

CLASSIFICATION SCHEME

1. THE GEOLOGIC ENVIRONMENT AND THE INFERRED GEOLOGIC PROCESSES DO NOT INDICATE FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

2. THE GEOLOGIC ENVIRONMENT AND THE INFERRED GEOLOGIC PROCESSES INDICATE LOW FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

3. THE GEOLOGIC ENVIRONMENT. THE INFERRED GEOLOGIC PROCESSES, AND THE REPORTED MINERAL OCCURRENCES INDICATE MODERATE FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

4. THE GEOLOGIC ENVIRONMENT. THE INFERRED GEOLOGIC PROCESSES, THE REPORTED MINERAL OCCURRENCES, AND THE KNOWN MINES OR DEPOSITS INDICATE HIGH FAVORABILITY FOR ACCUMULATION OF MINERAL RESOURCES.

LEVELS OF CONFIDENCE

A. THE AVAILABLE DATA ARE EITHER INSUFFICIENT AND/OR CANNOT BE CONSIDERED AS DIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES WITHIN THE RESPECTIVE AREA.

B. THE AVAILABLE DATA PROVIDE INDIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

C. THE AVAILABLE DATA PROVIDE DIRECT EVIDENCE, BUT ARE QUANTITATIVELY MINIMAL TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

D. THE AVAILABLE DATA PROVIDE ABUNDANT DIRECT AND INDIRECT EVIDENCE TO SUPPORT OR REFUTE THE POSSIBLE EXISTENCE OF MINERAL RESOURCES.

EXPLANATION

Area I.D. Number ↘ 1(ls) – 4D ↙ Level of Confidence
Commodity ↗ ↖ Classification

s	Sand	cl	Clay
g	Gravel	ls	Limestone
st	Stone	dl	Dolomite
c	Cinders	P	Peat
p	Pumice	pw	Petrified
pt	Pumicite		

APPENDIX H

ECONOMICS CALCULATIONS

APPENDIX H

ECONOMICS CALCULATIONS

LIVESTOCK CALCULATIONS

Income

Ranch budgets from the Ellis-Pahsimeroi, Big Lost-Mackay, and Big Desert Grazing EISs were used to determine average sales per AUM. This gave 3 sheep budgets and 13 cattle budgets that could be used. The sheep budgets averaged $26.69 sales per AUM, while the cattle budgets averaged $21.43 per AUM. These figures were converted to a single sales per AUM figure by taking a weighted average based on total AUM needs. The table below shows how this calculation was made.

Type	Aug. Sales Per AUM	Total AUM Needs	% of Total	Weighted Aug. Sales/AUM
Cattle	$21.43	348,000	95%	$20.36
Sheep	$26.69	19,200	5%	$ 1.34
TOTALS		367,200	100%	$21.70

The resulting sales per AUM ($21.70) was then multiplied by the change in AUMs. This gave a total change in sales that was converted to direct income change using the USFS IMPLAN model's income per dollar of sales coefficient. Direct income was converted to total income change using the personal income multiplier, also estimated by IMPLAN. These numbers are:

Direct Income/Dollar of Sales Coefficient = 0.0279
Personal Income multiplier = 3.6405

The resulting calculations for alternative E would be:

Change in AUMs (Long-Term) = + 2,924
Sales Per AUM = x $ 21.70
Total Sales = $ 63,451
Direct Income Coefficient = 0.0279
Direct Income = $ 1,770
Personal Income Multiplier = 2.8168
Total Income = $ 6,445

Employment

Employment changes were estimated in much the same manner as income. The change in total sales was multiplied by the employment per $1 million sales coefficient. The resulting direct employment change was multiplied by the employment multiplier to arrive at total employment change. These numbers, estimated by IMPLAN, were:

Direct Employment Per $1 Million Sales = 6.5896
Employment Multiplier = 2.8168

The resulting calculations for Alternative E would be:

Change in AUMs (Long-Term) = + 2,924
Sales Per AUM = x $ 21.70
Total Sales = $ 63,451
Direct Employment Coefficient = 6.5896
Direct Employment (Per $1 million sales) = $ 1,770
Employment Multiplier = 2.8168
Total Employment = $ 6,445

Capital Value

Change in capital value is based on changes in active preference. This differs from the income and employment calculations, which were based o changes in actual use. The range of values reported in Chapter 3 (Economics) was used to determine changes in capital value. The change in AUM of active preference was changed to animal units by dividing by 12 These were then multiplied by the high and low values reported in th cited references to show the possible range of change in value. The calculations made for Alternative E would be:

Change in AUMs (Active Preference) = - 8,433
Divided by 12 = - 12
Total Animal Units = - 702.8
Multiplied by High Values = x 3,000/AU
= -$2,108,250

Multiplied by Low Value = x 3,000/AU
= -$475,762

CROP AGRICULTURE CALCULATIONS

7-Year Rotation Which Includes:

2 years of Barley @ 57.5 bu. per acre
5 years of Alfalfa @ 3.05 tons per acre

57.5 bu. of Barley times $2.94 per bu. = $169.05/acre
3.05 tons of Alfalfa times $71.15 per ton = 217.01/acre

$169.05 x 2 years = $ 338.10
$217.01 x 5 years = $1,085.05
TOTAL = $1,423.15
Divided by 7 years
Sales per year = $ 203.31 per acre

NOTE: The yields are from the Agriculture Development Economic Model for Lemhi County and the prices are Fiscal Year 85 normalized crop prices (an inherent part of the model).

Alternative E - Income (Agricultural Development)

Total Ag. Development Acres = 5,310
Sales Per Acre = $ 203.31
Total Sales = $1,079,576.00

From the USFS's IMPLAN Model [1]

Income Per Dollar of Sales Coefficient = .0468
Personal Income Multiplier = 2.0863

[1] For food, feed grains, and grass seed sector

Total Sales = $1,079,576
Income per $1 Sales = .0468
Direct Income = $ 50,524
Personal Income Multiplier = 2.0863
Total Income = $ 105,408

Alternative E - Employment (Agricultural Development)

From USFS's IMPLAN Model

Employment Per $1 Million Sales = 10.6124
Employment Multiplier = 1.6984

Direct Employment = $1,079,576 x 10.6124 = 11.4568 or 11.5
Total Employment = 11.5 x 1.6984 = 19.5

APPENDIX I

RESOURCE MONITORING AND EVALUATION PLAN

APPENDIX I
RESOURCE MONITORING AND EVALUATION PLAN

TABLE I-1

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
FOREST MANAGEMENT	Reforestation stocking survey	All past and present timber sale areas, plantations, and wildfires in timber types	Regeneration stocking survey method as outlined in April 24, 1985 District Instruction Memorandum	Trees/acre	Plantations: 1, 3, and 5 years following planting or until stocked and established; natural Regeneration: 5-year intervals until stocked and established	Identification of nonstocked timber stands	$1,500
	Timber sale contract compliance	All active timber sales	Timber sale inspections	Site inspection; monitoring compliance with timber sale contract	Minimum of twice per week during periods of logging activity	Noncompliance with contract specifications; exceeding environmental parameters of Idaho Forest Practices Act	$2,000
	Forest insect and disease reconnaissance	All timber stands	Aerial and field surveys	Number of infected acres & extent of infection	One USFS flight per year and random field reconnaissance	Data revealing above average occurrence of forest insects or disease	$ 500
VEGETATION	Utilization	All allotments	Key forage plant method (Draft Manual 4423)	Percent of forage plant removed	Annually (within 10 days after close of each grazing period)	Generally utilization greater than 50% on native range; special cases, riparian zones, meadows, vegetation treatment areas, seeding, fall use areas, etc., will require variation in allowable utilization levels.	$5,000
	Actual use	All allotments	Actual grazing use reports submitted by livestock operators; livestock compliance checks	Animal unit months (AUMs)	Annually	Consider with precipitation in determining why utilization is at monitored level.	$3,125
	Precipitation	All allotments	Special site-specific precipitation gauges	Inches of precipitation	Quarterly yearlong	Consider with actual use in determining why utilization is at monitored level.	$3,750
	Trend	a) All "I" category allotments with AMPs and selected "M" category allotments b) Allotments not under an AMP where adjustments in active preference are proposed	Nested frequency plot method, photos	Percent frequency of key species; percent ground cover	a) Annually for one complete grazing cycle, then after each grazing cycle b) First, third, and fifth year, then on a 5-year basis	(a and b) Downward index summary from base of 10 points	$27,500
	Condition	All allotments	Range Condition Guide as outlined in SCS National Range Handbook, Section 305	Percent pounds production compared to climax allowance	At the end of each grazing cycle for AMP areas; at 5-year intervals on other allotments	Condition reduced by 1 class or 10% from original reading (if latest reading is less than good or indications are that next reading will be less than good)	$3,750

TABLE I-1 (Continued)

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
WILDLIFE	Bald eagle	Salmon & Lemhi rivers	Aerial, winter	Number and age	Annually	20% or greater decrease in number for two consecutive years	$2,000
	Gray wolf	Approx. Sandy Creek to Eighteenmile Creek	Aerial winter, big game winter range condition, human activity levels	Extensive forage utilization transects and cover mapping; zones and estimated level of human activity	Annually and tri-annually	Downward trend in big game winter range condition; more than incidental or casual human activity	$3,600
	Idaho sensitive species	Throughout resource area	Observation of representative sites during key periods	Occupied sites and population levels	Annually	10% loss of occupied sites and numbers/site	$1,400
	Big game winter range condition	Selected ranges	Extensive browse transects Pellet transects Utilization of grasses in key elk winter range	Age/fawn class utilization Big game days/ac. percent	3-year cycle Annually 2-year cycle	Over 70% utilization for 2 consecutive cycles 25% decrease in numbers Over 30% utilization prior to winter	$5,000
	Distribution on winter range	Selected ranges	Aerial and ground surveys	Estimate numbers, location level of human activity	Annually	Any noticeable change in use areas for two comparable winters and/or apparent trend in numbers that seem unusual	$3,000
	Antelope habitat condition	Selected ranges	Canopy cover of sagebrush	Canopy cover of sagebrush, forb production index	Tri-annually (more frequently in areas subject to modification)	Any reduction of shrub canopy parameters as shown in Standard Operating Procedures	$5,000
			Guzzler observations	Number of animals and frequency of use	annually	No improvement in distribution and breeding territories	$1,000
	Sage grouse	Selected summer ranges	Guzzler observations	Number of birds & frequency of use	Annually	No improvement in distribution	
		Selected leks	Observation of leks during breeding season	Number of males	Annually	Population levels below 1981 levels	$2,000
		Selected wintering habitat	Photo, toe-point	% cover of shrubs and forbs	3-year cycle	20% decrease in key forbs and browse species (see Standard Operating Procedures)	$ 500
		Selected brood Rearing	Photo, toe-point	% cover of forbs and visual view of foliage height	Annually	Any decrease in forb composition until areas are back into satisfactory condition	$ 500
		Selected nesting	Photo, toe-point	% cover of sagebrush and amount of nesting material available	3-year cycle	10% variation from sage grouse guidelines (see Standard Operating Procedures)	$1,500

TABLE I-1 (Continued)

Element	Item	Location	Technique	Unit of Measure	Frequency	Information Warranting A Decision Change	Annual Cost
WATERSHED	Water quality, Water temp., pH, dissolved O_2, water discharge, turbidity	McDevitt Creek, Hawley Creek, Pattee Creek, Henry Creek, Sevenmile Creek	Marsh-McBurney Meter, HACH water chemical analysis kit	Variable	Once every 2 years	Water quality parameters exceeding recommended state of Idaho standards	$ 225/ stream/ year
	Wetland/riparian areas	McDevitt Creek, Hawley Creek, Pattee Creek, Cow Creek, Sevenmile Creek, Henry Creek, Beercan Flats, Muddy Creek, Eighteenmile Creek	Photo transects	Variable	Once every 2 years	Streambank instability, heavy utilizations, woody riparian vegetation response	$ 75/ stream/ year
FISHERIES	Fisheries habitat	McDevitt Creek, Eighteenmile Creek, Sevenmile Creek	Photo transects	Variable	Once every 2 years	Streambank instability, heavy utilizations, woody riparian vegetation response	$ 75/ stream/ year
SOILS	Erosion	Bentonite badlands	Patrol, photo recordation, point step transect as needed	% ground cover, acres affected	3 to 5 years	Downward trend, limited response of desirable species	$ 1,500
	Compaction	Areas surrounding new troughs and guzzlers	Photo recordation and bulk density samples	Pounds per cubic foot	Before installation and biannually thereafter	Information gathered will determine future sites to reduce existing compaction and identify highly compactable potential soils.	$ 2,000
RECREATION	General recreation use	All of resource area outside of special recreation management areas	Ocular reconnaisance, aerial photography	Visitor counts, area inspections to look for vandalism, road proliferation	Two days/month, one flight/year, photos every 2nd year	Collected data revealing user conflicts, resource degradation, or safety hazards	$ 5,000/ year + $2,000 every other year.
	Developed site use	Developed Sites (7)	Ocular reconnaisance	Visitor counts, site damage, overuse of vegetation	Once every other week at each site	Vandalism, excessive wear and tear, or nonuse	$10,000
WILDERNESS	Interim management	Eighteenmile wilderness study area	Ocular and photo reconnaisance	Road proliferation, mining sites	Monthly	Any change to existing landscape	$ 5,000
CULTURAL RESOURCES	Condition of cultural resources	Cultural resource management plan areas,	Patrol and observation	Number of impacts on sites	3 to 5 trips annually	Any adverse impact to site	$ 3,000
		plus the remainder of the planning area	Patrol and observation	Number of impacts on sites	3 to 5 trips per year	Any adverse impact to site	$2,000
NATURAL HISTORY OR PALEONTOLOGY	Condition of caves, natural history, or paleontological resources	Areas of geological interest	Photo inventory, patrol and observation	Number of impacts	Once every 2 years	Any new incidence of collecting or vandalism at any area	$1,000

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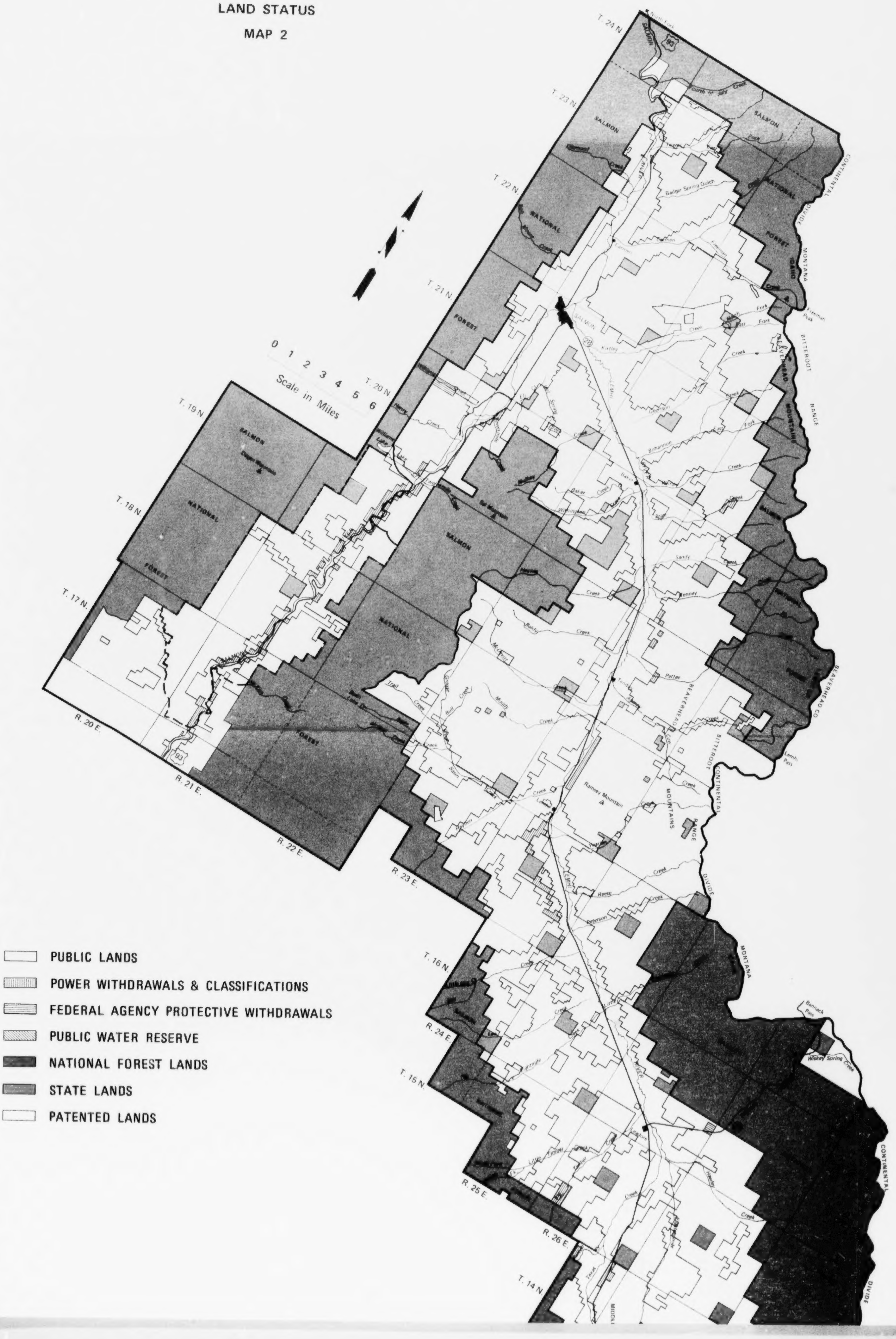
LAND STATUS

MAP 2



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▤ FEDERAL AGENCY PROTECTIVE WITHDRAWALS
▨ PUBLIC WATER RESERVE
■ NATIONAL FOREST LANDS
▩ STATE LANDS
☐ PATENTED LANDS
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTEROOT RANGE
BEAVERHEAD MOUNTAINS
BEAVERHEAD CO.
SALMON NATIONAL FOREST
SALMON
Lemhi Pass
Bannock Pass
Wiskey Spring Creek
Ramsey Mountain
Badger Spring Gulch
MIDDLE
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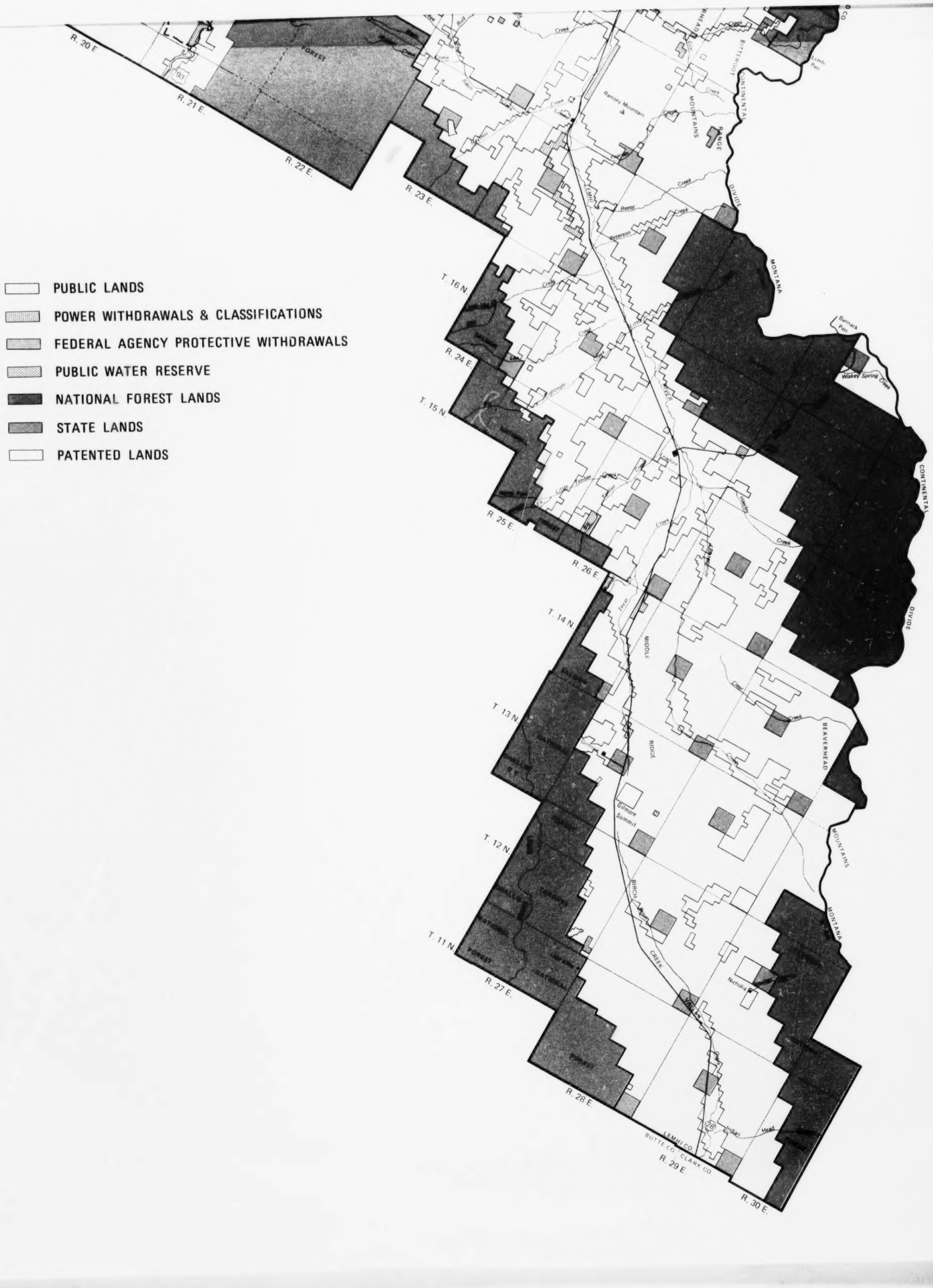
R. 26 E.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▥ POWER WITHDRAWALS & CLASSIFICATIONS
▤ FEDERAL AGENCY PROTECTIVE WITHDRAWALS
▨ PUBLIC WATER RESERVE
■ NATIONAL FOREST LANDS
▩ STATE LANDS
▭ PATENTED LANDS
CONTINENTAL
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MONTANA
BITTERROOT
RANGE
MOUNTAINS
BEAVERHEAD
MOUNTAINS
Bannack Pass
Wiskey Spring Creek
Ramsey Mountain
LEMHI
RIVER
Reese
Peterson
Creek
Hawley
MIDDLE
RIDGE
Gilmore Summit
BIRCH
CREEK
Nicholia
Indian
Head
LEMHI CO.
BUTTE CO.
CLARK CO.
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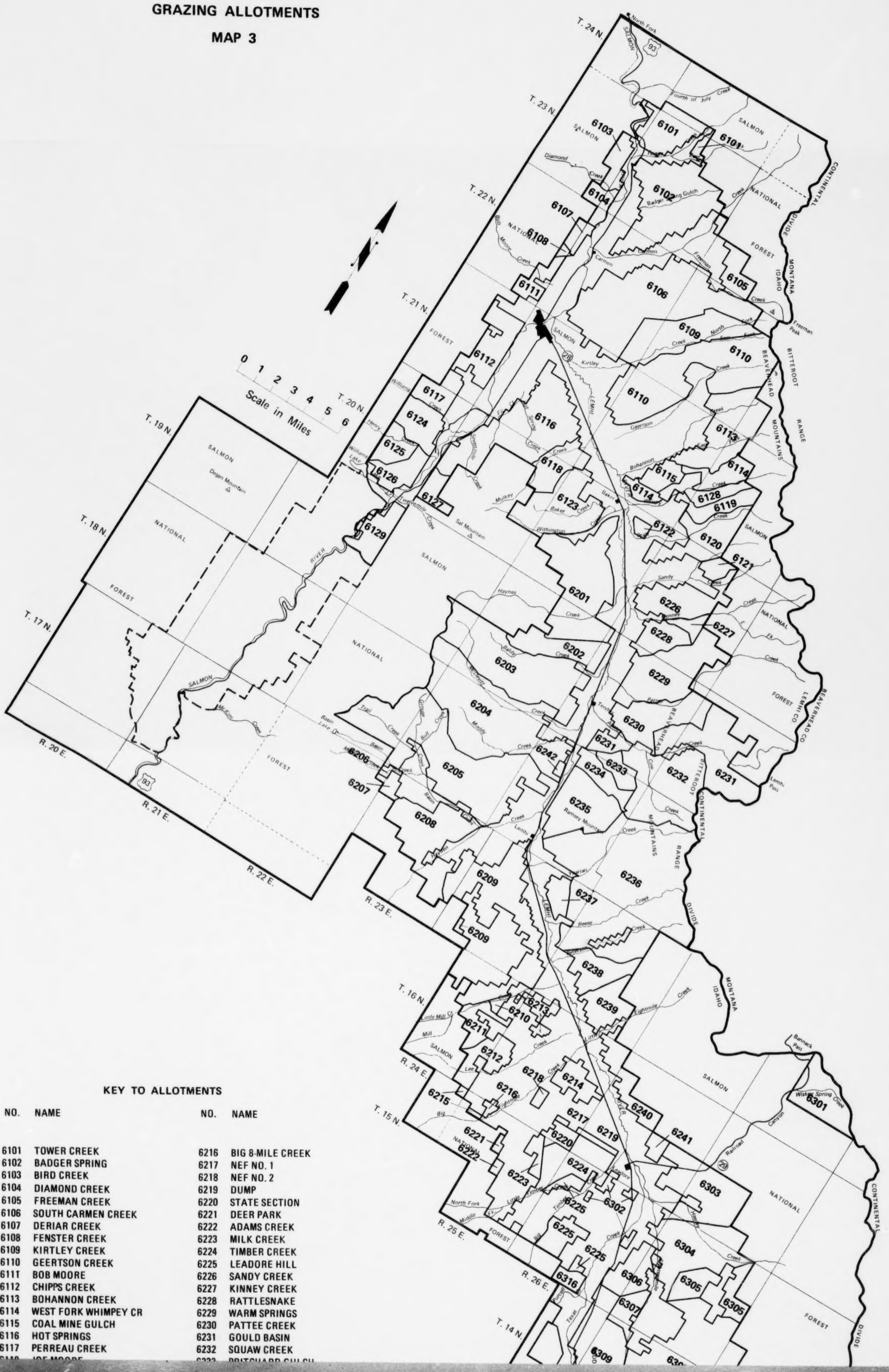
GRAZING ALLOTMENTS
MAP 3



CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTEROOT RANGE
BEAVERHEAD MOUNTAINS
BEAVERHEAD CO
LEMHI CO
Freeman Peak
Lemhi Pass
Bannock Pass
SALMON NATIONAL FOREST
SALMON RIVER
LEMHI
North Fork
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Fourth of July Creek
Diamond Creek
Badger Spring Gulch
Carmen Creek
Freeman Creek
North Fork
Kirtley Creek
Geertson Creek
Bohannon Creek
Baker Creek
Withington Creek
Mulkey Creek
Sal Mountain
Haynes Creek
Bob Moore Creek
Williams Creek
Henry Creek
Williams Lake
Twelvemile Creek
Sevenmile Creek
Hot Springs Creek
Sandy Creek
Wimpey Creek
Pattee Creek
Bailey Creek
McDevitt Creek
Muddy Creek
Grouse Creek
Bull Creek
Trail Creek
Basin Creek
Basin Lake
Hawley Creek
Ramsey Mountain
Lemhi Creek
Reese Creek
Eightmile Creek
Little Mill Creek
Mill Creek
Lee Creek
Big Eightmile Creek
Timber Creek
Middle Fork
North Fork
Wiskey Spring Creek
Canyon Creek
Railroad
Texas Creek
Tendoy
Leadore
McKim Creek
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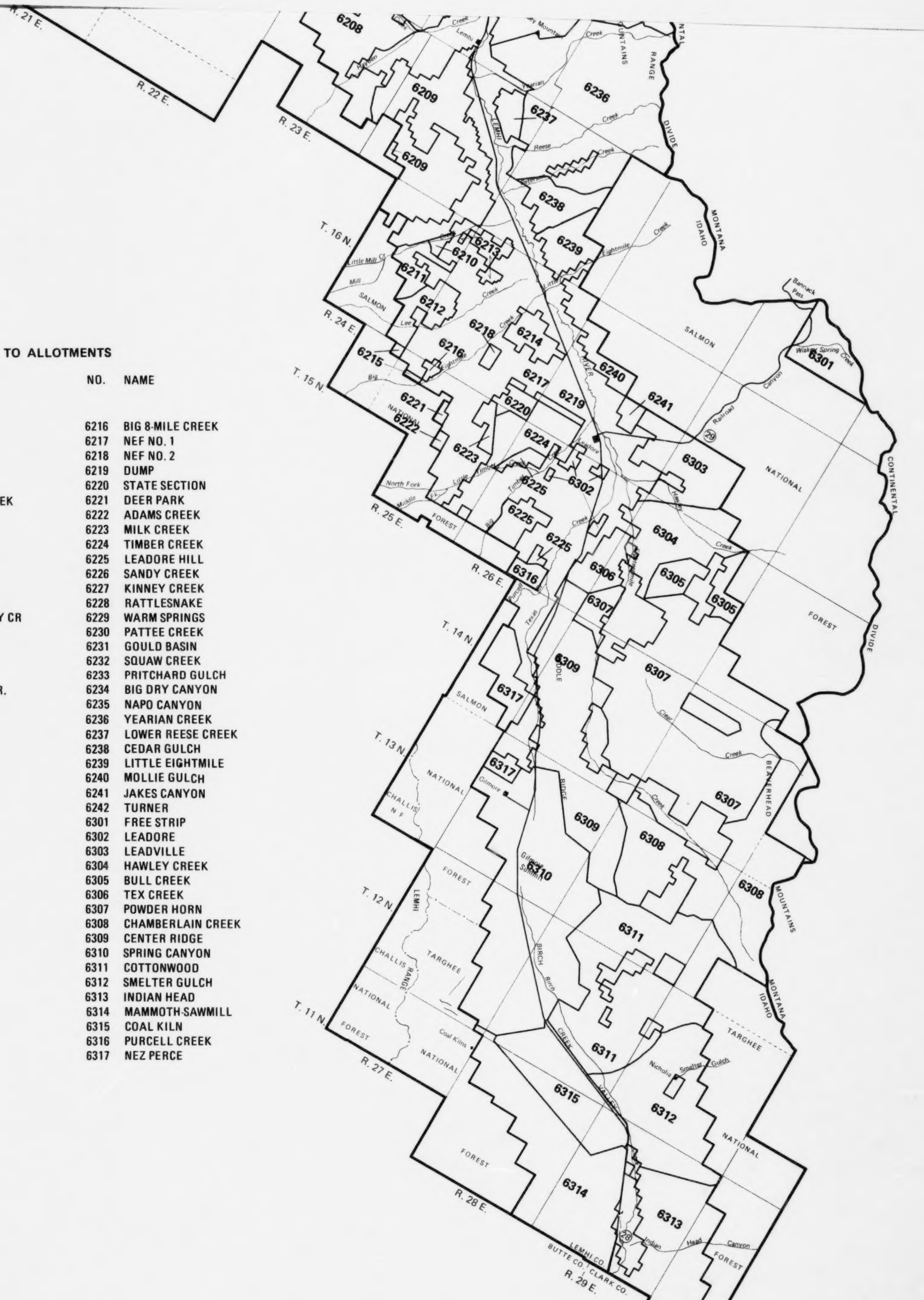
KEY TO ALLOTMENTS

NO.	NAME	NO.	NAME
6101	TOWER CREEK	6216	BIG 8-MILE CREEK
6102	BADGER SPRING	6217	NEF NO. 1
6103	BIRD CREEK	6218	NEF NO. 2
6104	DIAMOND CREEK	6219	DUMP
6105	FREEMAN CREEK	6220	STATE SECTION
6106	SOUTH CARMEN CREEK	6221	DEER PARK
6107	DERIAR CREEK	6222	ADAMS CREEK
6108	FENSTER CREEK	6223	MILK CREEK
6109	KIRTLEY CREEK	6224	TIMBER CREEK
6110	GEERTSON CREEK	6225	LEADORE HILL
6111	BOB MOORE	6226	SANDY CREEK
6112	CHIPPS CREEK	6227	KINNEY CREEK
6113	BOHANNON CREEK	6228	RATTLESNAKE
6114	WEST FORK WHIMPEY CR	6229	WARM SPRINGS
6115	COAL MINE GULCH	6230	PATTEE CREEK
6116	HOT SPRINGS	6231	GOULD BASIN
6117	PERREAU CREEK	6232	SQUAW CREEK


CONTINENTAL
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IDAHO
RANGE
MOUNTAINS
BEAVERHEAD
SALMON
NATIONAL
FOREST
TARGHEE
CHALLIS N F
CHALLIS RANGE
LEMHI
RIVER
BIRCH CREEK
VALLEY
RIDGE
Bannack Pass
Railroad Canyon
Wild Spring Creek
Gilmore
Leadore
Coal Kilns
Nicholia
Smelter Gulch
Indian Head Canyon
LEMHI CO.
BUTTE CO.
CLARK CO.
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KEY TO ALLOTMENTS

NO.	NAME	NO.	NAME
6101	TOWER CREEK	6216	BIG 8-MILE CREEK
6102	BADGER SPRING	6217	NEF NO. 1
6103	BIRD CREEK	6218	NEF NO. 2
6104	DIAMOND CREEK	6219	DUMP
6105	FREEMAN CREEK	6220	STATE SECTION
6106	SOUTH CARMEN CREEK	6221	DEER PARK
6107	DERIAR CREEK	6222	ADAMS CREEK
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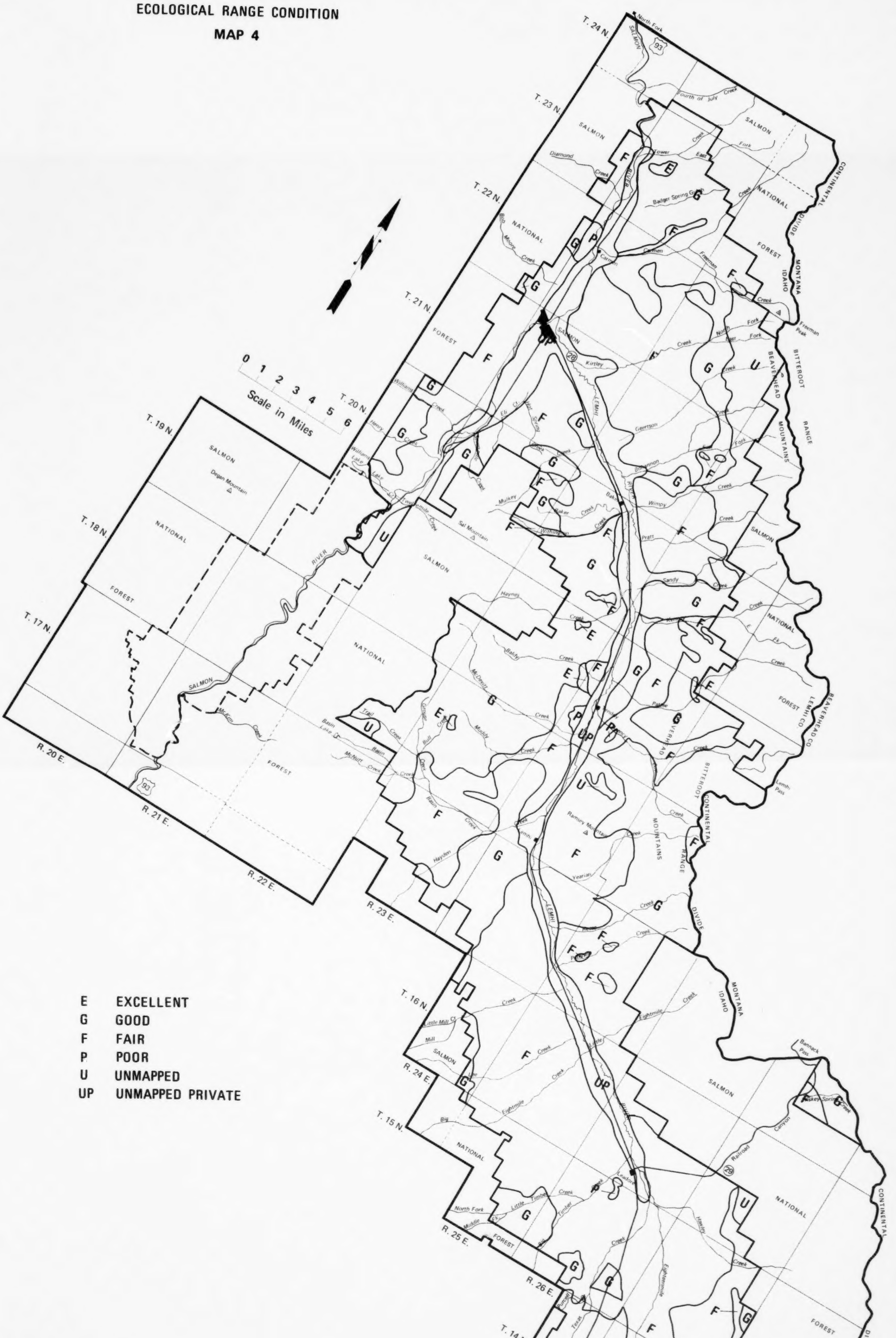
6109	KIRTLEY CREEK	6224	TIMBER CREEK
6110	GEERTSON CREEK	6225	LEADORE HILL
6111	BOB MOORE	6226	SANDY CREEK
6112	CHIPPS CREEK	6227	KINNEY CREEK
6113	BOHANNON CREEK	6228	RATTLESNAKE
6114	WEST FORK WHIMPEY CR	6229	WARM SPRINGS
6115	COAL MINE GULCH	6230	PATTEE CREEK
6116	HOT SPRINGS	6231	GOULD BASIN
6117	PERREAU CREEK	6232	SQUAW CREEK
6118	JOE MOORE	6233	PRITCHARD GULCH
6119	E. FORK WHIMPEY CR.	6234	BIG DRY CANYON
6120	PRATT CREEK	6235	NAPO CANYON
6121	PRONGHORN	6236	YEARIAN CREEK
6112	COUNTY ROAD	6237	LOWER REESE CREEK
6123	BAKER CREEK	6238	CEDAR GULCH
6124	WILLIAMS CREEK	6239	LITTLE EIGHTMILE
6125	HENRY CREEK	6240	MOLLIE GULCH
6126	LAKE CREEK	6241	JAKES CANYON
6127	TEN MILE	6242	TURNER
6128	WIMPEY CREEK	6301	FREE STRIP
6129	DUMMY CREEK	6302	LEADORE
6201	HAYNES CREEK	6303	LEADVILLE
6202	LOWER BASIN	6304	HAWLEY CREEK
6203	BALDY BASIN	6305	BULL CREEK
6204	MCDEVITT CREEK	6306	TEX CREEK
6205	GROUSE CREEK	6307	POWDER HORN
6206	BASIN CREEK	6308	CHAMBERLAIN CREEK
6207	MCNUTT CREEK	6309	CENTER RIDGE
6208	ROOSTERCOMB	6310	SPRING CANYON
6209	LITTLE SAWMILL	6311	COTTONWOOD
6210	MILL CREEK	6312	SMELTER GULCH
6211	WALTERS	6313	INDIAN HEAD
6212	LEE CREEK	6314	MAMMOTH-SAWMILL
6213	BIG SPRING	6315	COAL KILN
6214	HORSE HEAVEN	6316	PURCELL CREEK
6215	EVERSON CREEK	6317	NEZ PERCE

ECOLOGICAL RANGE CONDITION
MAP 4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BEAVERHEAD MOUNTAINS
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LEMHI CO
SALMON NATIONAL FOREST
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Freeman Peak
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Bannock Pass
Degan Mountain
Sal Mountain
Ramsey Mountain
Fourth of July Creek
Diamond Creek
Moose Creek
Carmen Creek
Freeman Creek
Kirtley Creek
Georgeson
Withington Creek
Wimpy Creek
Pratt Creek
Sandy Creek
Haynes
Bohannon
McDevitt Creek
Muddy Creek
Basin Creek
Hayden
Yearian
Eighteenmile
Hawley Creek
Canyon Creek
Railroad
Big Timber Creek
Little Timber
Texas
Williams Lake
McKim Creek
Badger Spring Gulch
Lake Cr
Mill
Little Mill Cr
Middle
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Scale in Miles
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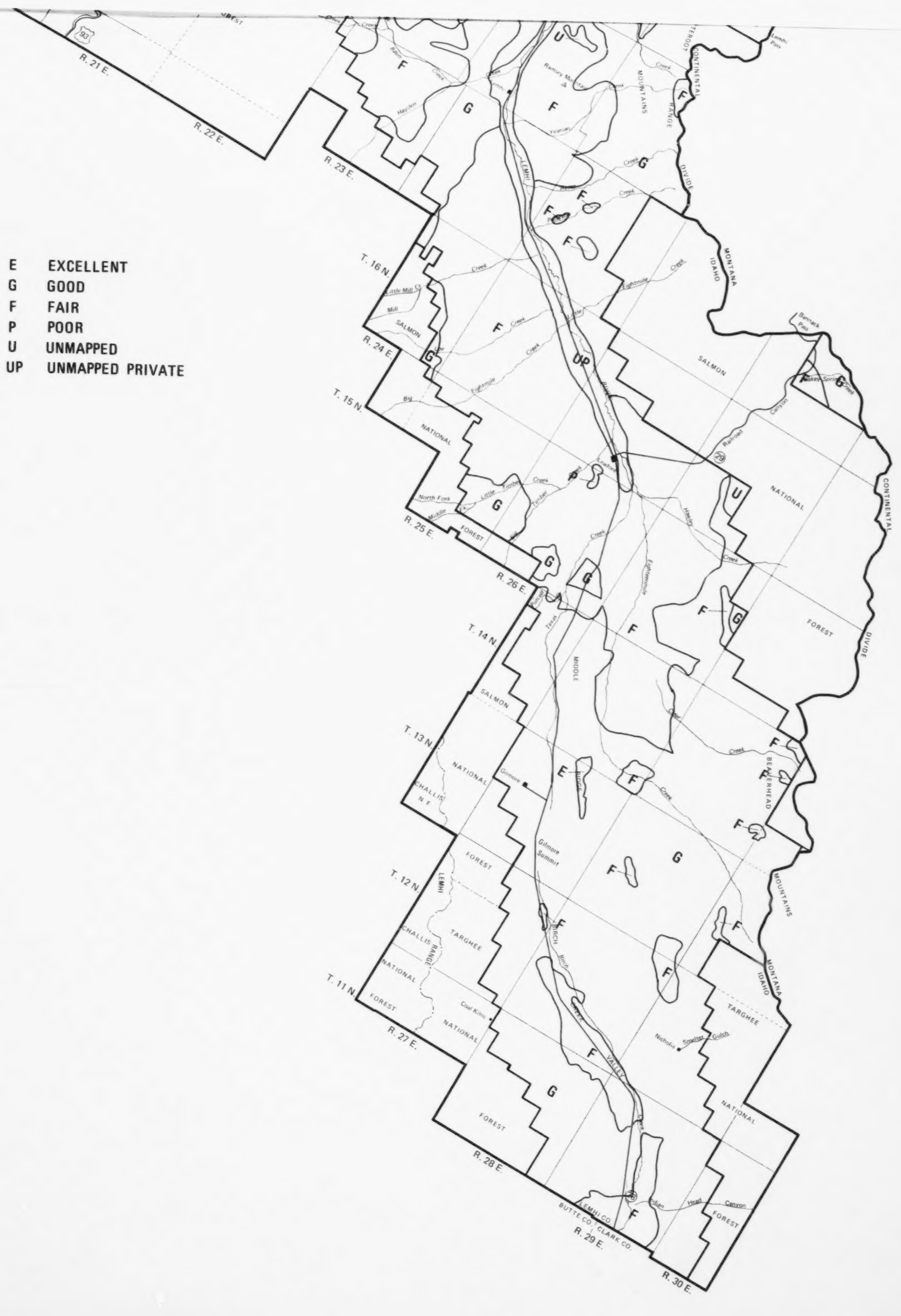
F
P
U
UP

E EXCELLENT
G GOOD
F FAIR
P POOR
U UNMAPPED
UP UNMAPPED PRIVATE


E EXCELLENT
G GOOD
F FAIR
P POOR
U UNMAPPED
UP UNMAPPED PRIVATE
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MONTANA
IDAHO
BITTERROOT RANGE
MOUNTAINS
BEAVERHEAD MOUNTAINS
SALMON NATIONAL FOREST
TARGHEE NATIONAL FOREST
CHALLIS N.F.
LEMHI RANGE
CHALLIS NATIONAL FOREST
LEMHI RIVER
MIDDLE RIDGE
BIRCH CREEK VALLEY
Gilmore Summit
Gilmore
Nicholia
Smelter Gulch
Coal Kilns
Bannack Pass
Railroad Canyon
Hawley Creek
Eighteenmile
Texas Creek
Indian Head Canyon
Ramsey Mountain
Hayden Creek
Little Mill Cr.
Big Eightmile
North Fork
Middle Fork
Little Timber Creek
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BUTTE CO.
CLARK CO.
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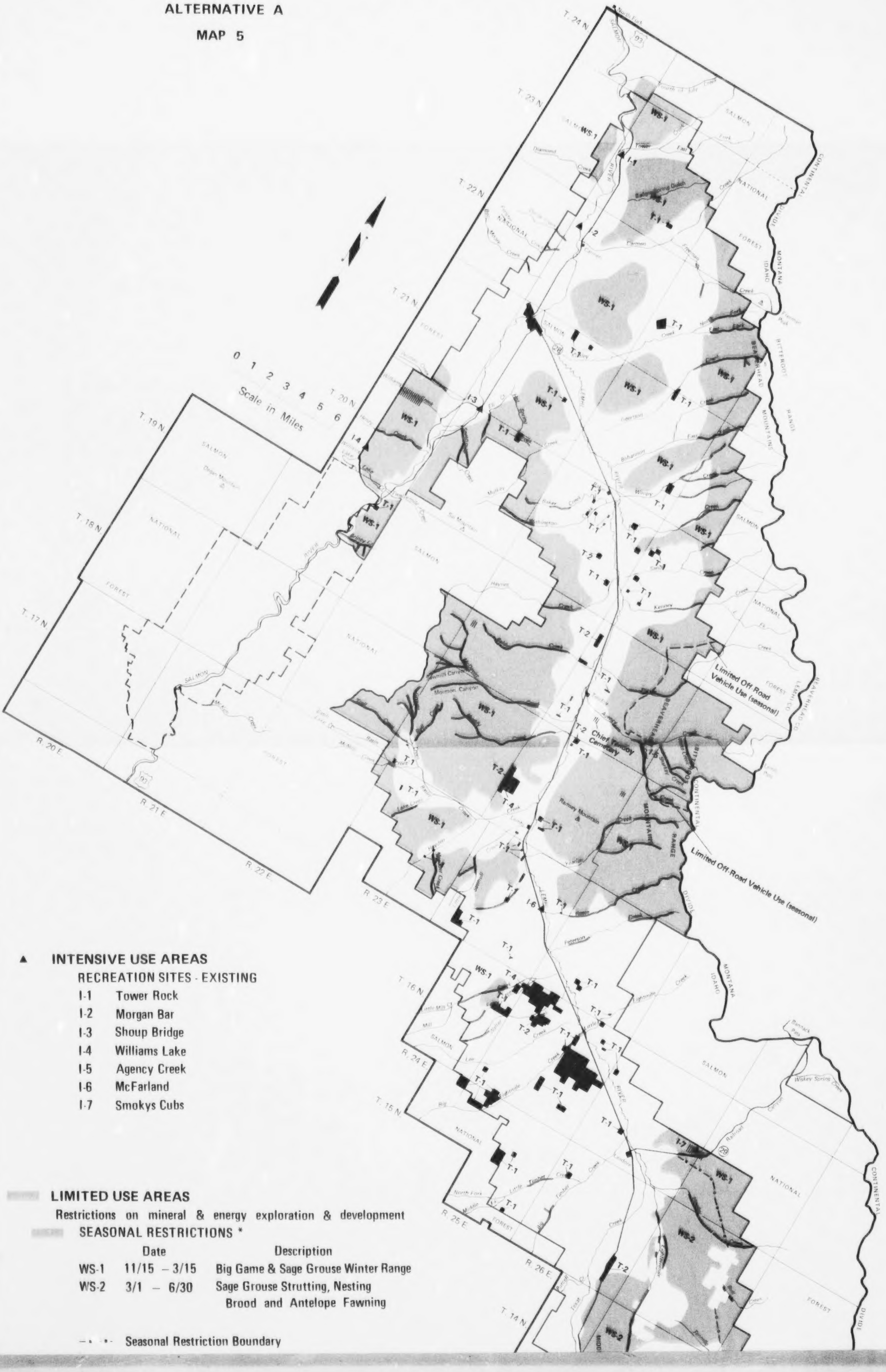
ALTERNATIVE A
MAP 5



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MONTANA
IDAHO
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
BEAVERHEAD CO.
LEMHI CO.
SALMON NATIONAL FOREST
SALMON RIVER
LEMHI RIVER
Limited Off Road Vehicle Use (seasonal)
Limited Off-Road Vehicle Use (seasonal)
Chief Tendoy Cemetery
Ramsey Mountain
Sawmill Canyon
Mormon Canyon
North Fork
WS-1
WS-2
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93
28

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

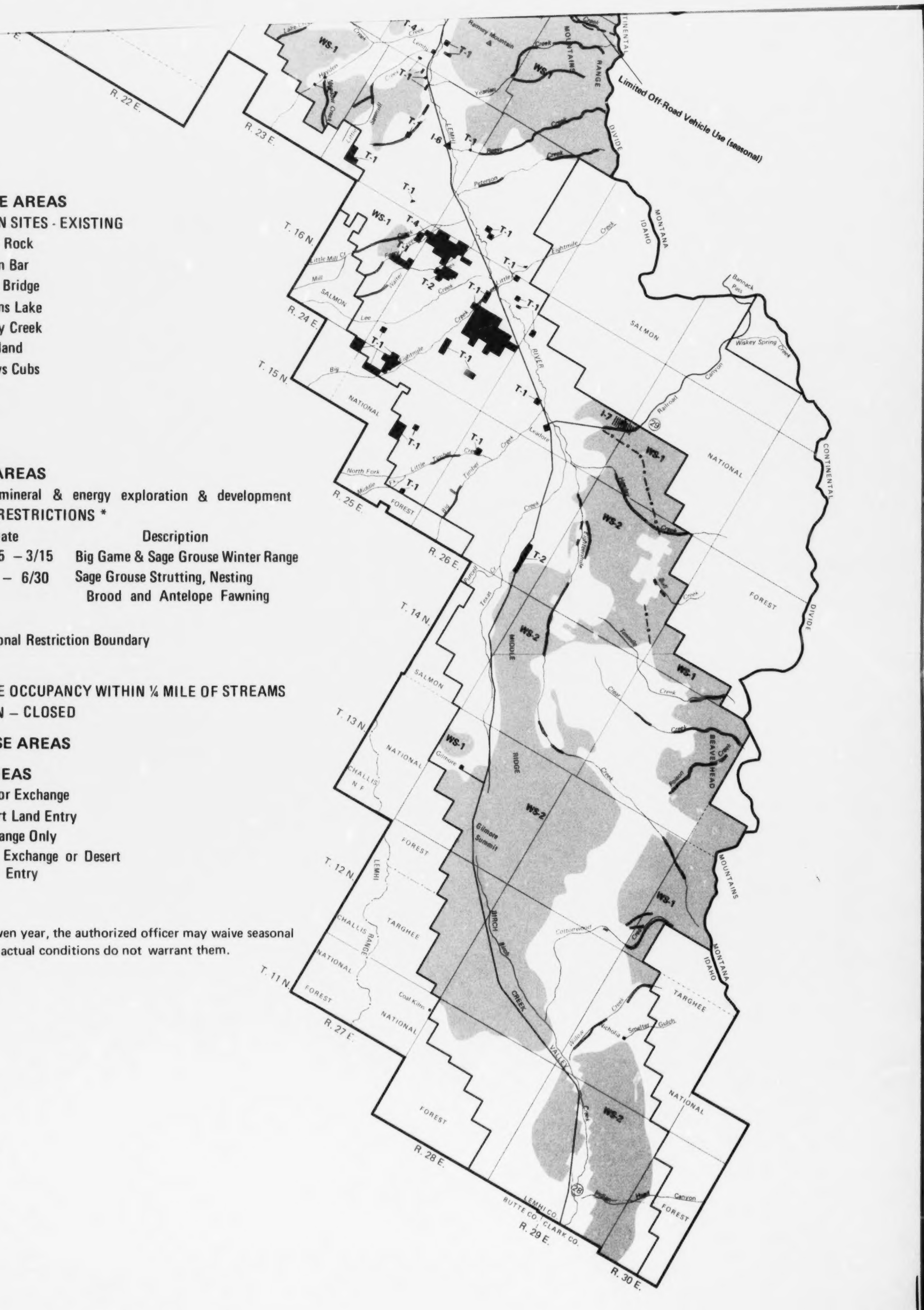
▨ **LIMITED USE AREAS**

Restrictions on mineral & energy exploration & development

▨ SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning

— • • Seasonal Restriction Boundary



Limited Off-Road Vehicle Use (seasonal)
CONTINENTAL DIVIDE
MONTANA
IDAHO
BEAVERHEAD MOUNTAINS
SALMON NATIONAL FOREST
TARGHEE NATIONAL FOREST
CHALLIS N.F.
LEMHI RANGE
LEMHI RIVER
MIDDLE RIDGE
BIRCH CREEK VALLEY
Gilmore Summit
Bannack Pass
Ramsey Mountain
LEMHI CO.
BUTTE CO.
CLARK CO.
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R. 30 E.
WS-1
WS-2
T-1
T-2
T-4
I-6
I-7
28

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

▨ **LIMITED USE AREAS**

Restrictions on mineral & energy exploration & development

▨ SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning

–·–·– Seasonal Restriction Boundary

NO SURFACE OCCUPANCY WITHIN ¼ MILE OF STREAMS

||||||||| WITHDRAWN – CLOSED

□ **MODERATE USE AREAS**

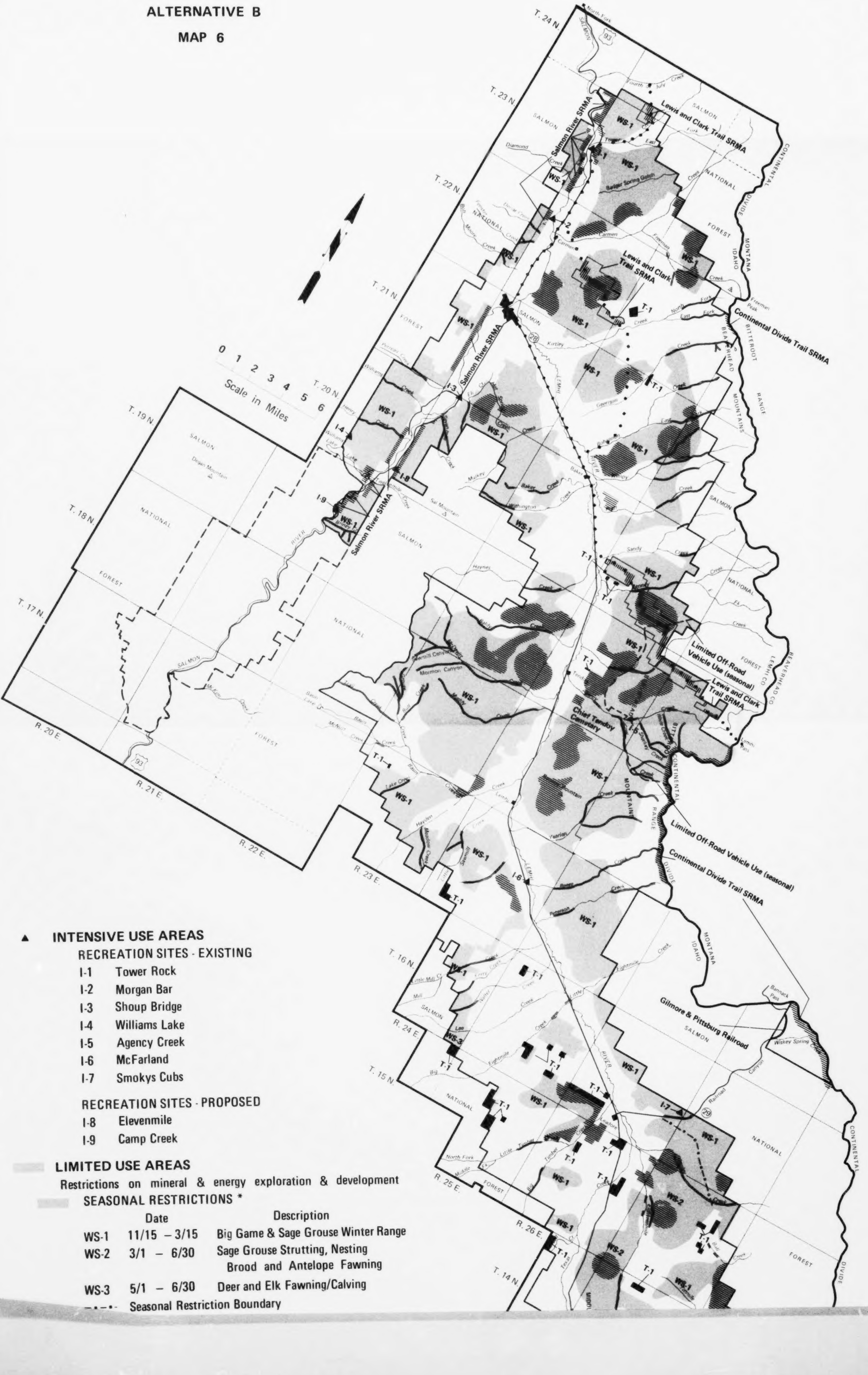
■ **TRANSFER AREAS**

T-1	Sale or Exchange
T-2	Desert Land Entry
T-3	Exchange Only
T-4	Sale, Exchange or Desert Land Entry

* During any given year, the authorized officer may waive seasonal restrictions if actual conditions do not warrant them.

ALTERNATIVE B

MAP 6



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T. 23 N
T. 22 N
T. 21 N
T. 20 N
T. 19 N
T. 18 N
T. 17 N
T. 16 N
T. 15 N
T. 14 N
R. 20 E.
R. 21 E.
R. 22 E.
R. 23 E.
R. 24 E
R. 25 E.
R. 26 E.
North Fork
93
29
Salmon River SRMA
Lewis and Clark Trail SRMA
Continental Divide Trail SRMA
Limited Off-Road Vehicle Use (seasonal)
Chief Tendoy Cemetery
Gilmore & Pittsburg Railroad
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTEROOT RANGE
BEAVERHEAD MOUNTAINS
BEAVERHEAD CO.
LEMHI CO.
SALMON NATIONAL FOREST
SALMON RIVER
LEMHI RIVER
Freeman Peak
Lemhi Pass
Bannack Pass
Wiskey Spring
Sal Mountain
Degan Mountain
Badger Spring Gulch
Mormon Canyon
Sawmill Canyon
Meadow Creek
Lake Creek
WS-1
WS-2
WS-3
T-1
I-1
I-2
I-3
I-4
I-5
I-6
I-7
I-8
I-9

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

RECREATION SITES - PROPOSED

I-8	Elevenmile
I-9	Camp Creek

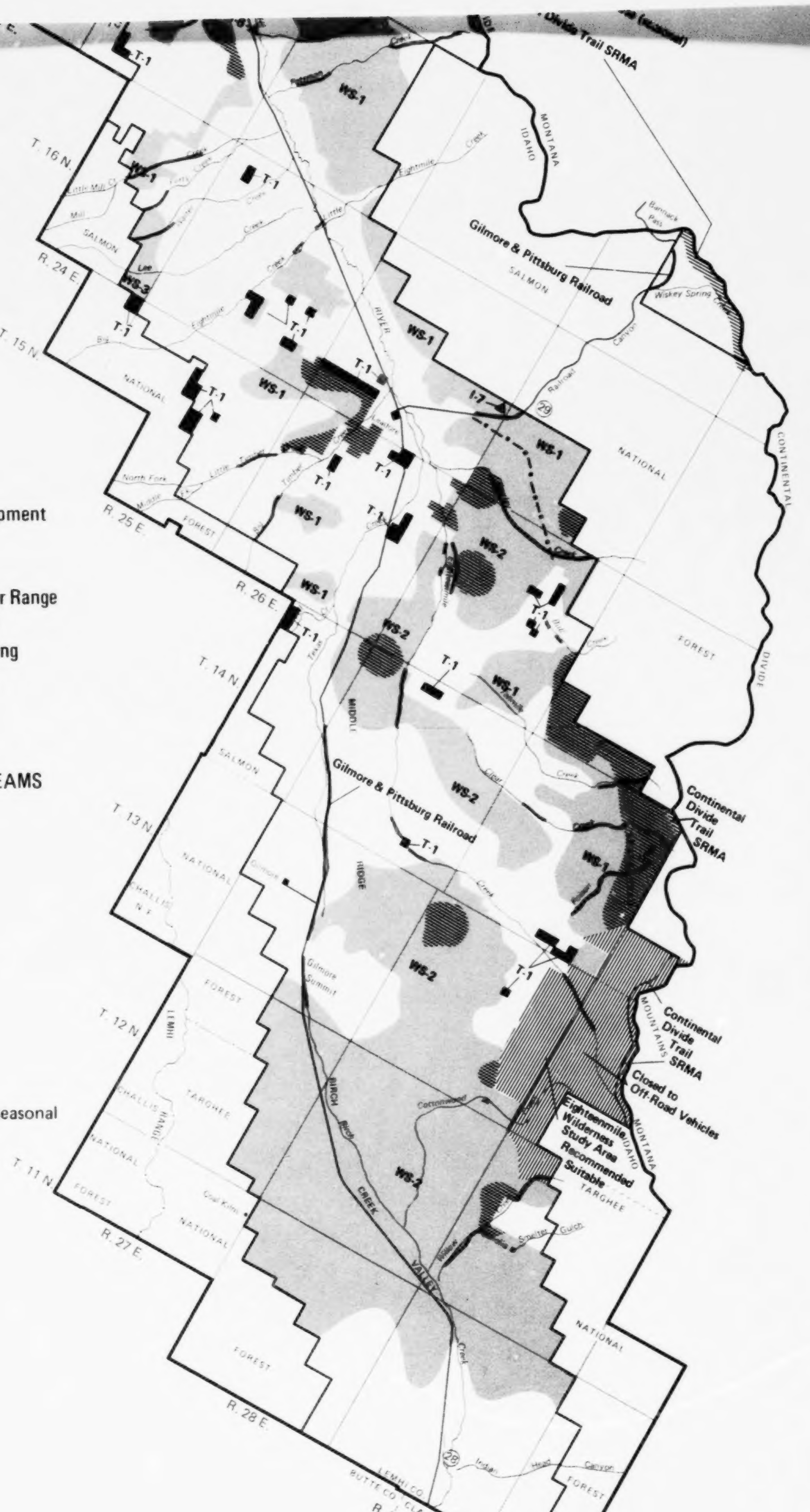
▨ **LIMITED USE AREAS**

Restrictions on mineral & energy exploration & development

▨ SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

Seasonal Restriction Boundary


Divide Trail SRMA
MONTANA
IDAHO
Gilmore & Pittsburg Railroad
SALMON
Bannock Pass
Wiskey Spring
CONTINENTAL
DIVIDE
NATIONAL
FOREST
Continental Divide Trail SRMA
Continental Divide Trail SRMA
MOUNTAINS
Closed to Off-Road Vehicles
Eighteenmile Wilderness Study Area Recommended Suitable
TARGHEE
T. 16 N
T. 15 N
T. 14 N
T. 13 N
T. 12 N
T. 11 N
R. 24 E.
R. 25 E.
R. 26 E.
R. 27 E.
R. 28 E.
R. 29 E.
R. 30 E.
WS-1
WS-2
WS-3
T-1
I-7
RIVER
MIDDLE
RIDGE
Gilmore Summit
BIRCH
CREEK
VALLEY
LEMHI
RANGE
CHALLIS
LEMHI CO.
BUTTE CO.
CLARK CO.
28
29

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

RECREATION SITES - PROPOSED

I-8	Elevenmile
I-9	Camp Creek

▨ **LIMITED USE AREAS**

Restrictions on mineral & energy exploration & development

▨ SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

–·–·- Seasonal Restriction Boundary

▤ NO SURFACE OCCUPANCY

NO SURFACE OCCUPANCY WITHIN ¼ MILE OF STREAMS

▥ WITHDRAWN – CLOSED

☐ **MODERATE USE AREAS**

■ **TRANSFER AREAS**

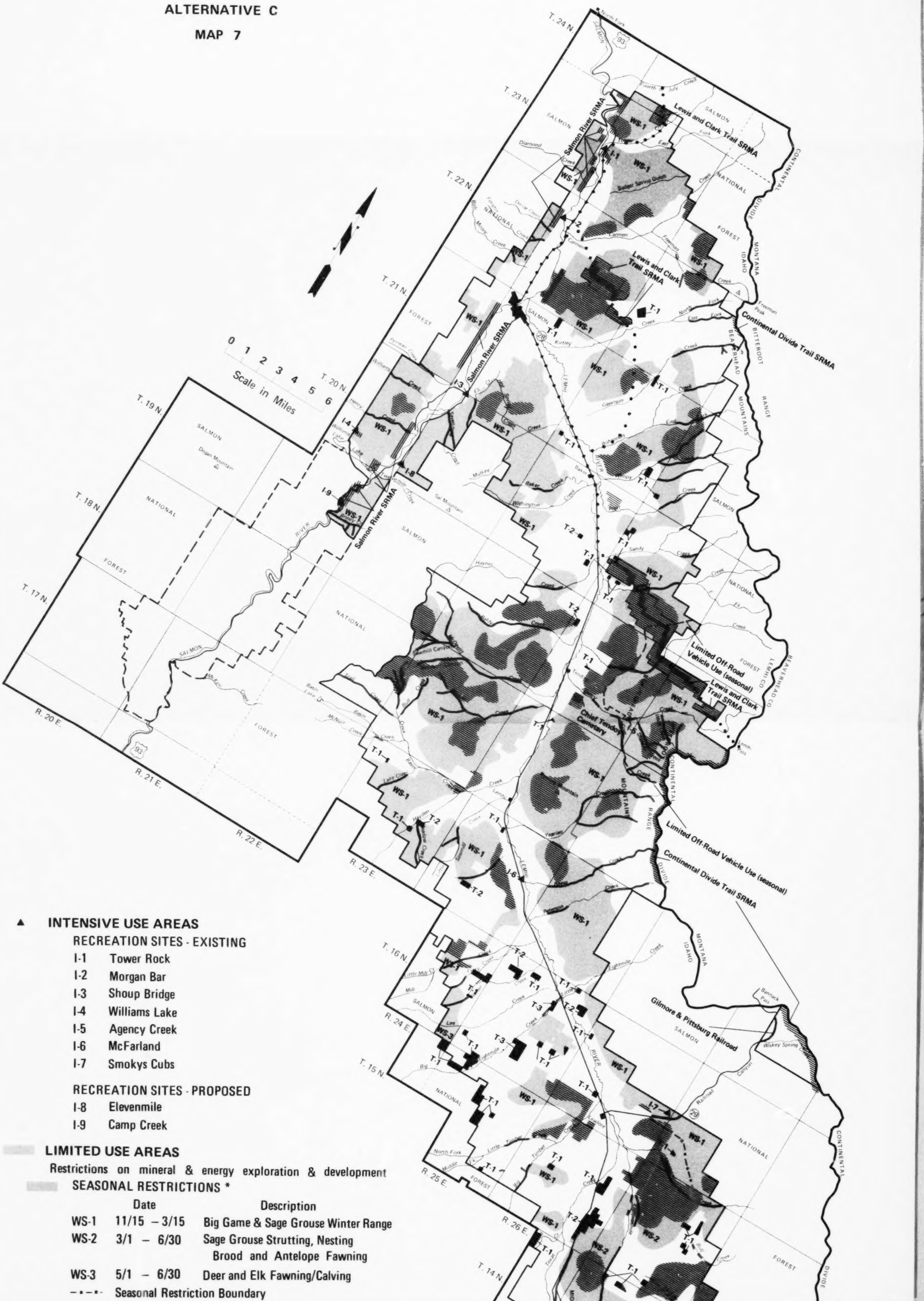
T-1 Sale or Exchange

. . . Lewis & Clark Trail

* During any given year, the authorized officer may waive seasonal restrictions if actual conditions do not warrant them.

ALTERNATIVE C

MAP 7



Lewis and Clark Trail SRMA
Salmon River SRMA
Continental Divide Trail SRMA
Limited Off-Road Vehicle Use (seasonal)
Chief Tendoy Cemetery
Gilmore & Pittsburg Railroad
CONTINENTAL DIVIDE
MONTANA
IDAHO
BEAVERHEAD CO.
LEMHI CO.
BITTEROOT RANGE
BEAVERHEAD MOUNTAINS
SALMON NATIONAL FOREST
SALMON RIVER
LEMHI RIVER
0 1 2 3 4 5 6
Scale in Miles
T. 24 N.
T. 23 N.
T. 22 N.
T. 21 N.
T. 20 N.
T. 19 N.
T. 18 N.
T. 17 N.
T. 16 N.
T. 15 N.
T. 14 N.
R. 20 E.
R. 21 E.
R. 22 E.
R. 23 E.
R. 24 E.
R. 25 E.
R. 26 E.
93
28
29
WS-1
WS-2
WS-3
T-1
T-2
T-3
I-1
I-3
I-4
I-5
I-6
I-7
I-8
I-9

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

RECREATION SITES - PROPOSED

I-8	Elevenmile
I-9	Camp Creek

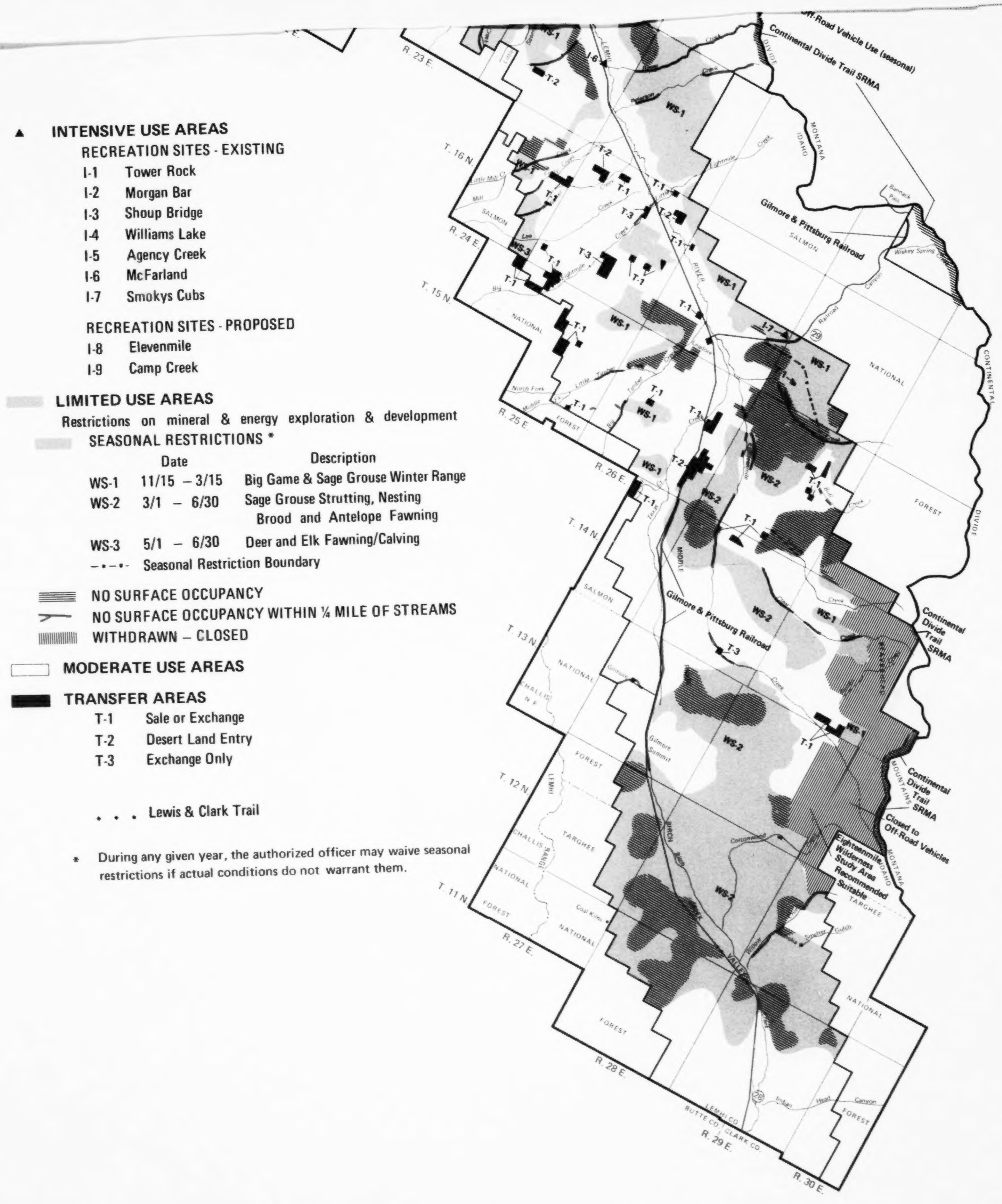
▨ **LIMITED USE AREAS**

Restrictions on mineral & energy exploration & development

▨ SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

-·-·- Seasonal Restriction Boundary


Off-Road Vehicle Use (seasonal)
Continental Divide Trail SRMA
DIVIDE
MONTANA
IDAHO
CONTINENTAL
DIVIDE
Gilmore & Pittsburg Railroad
SALMON
NATIONAL
FOREST
Bannack Pass
Wiskey Spring
Railroad Canyon
LEMHI
RIVER
MIDDLE
Eightmile
Creek
Little Mill Cr.
Mill
Lee
Big
North Fork
Little Timber
Texas
Continental Divide Trail SRMA
BEAVERHEAD
MOUNTAINS
Closed to Off-Road Vehicles
Eighteenmile Wilderness Study Area Recommended Suitable
TARGHEE
CHALLIS N.F.
CHALLIS RANGE
LEMHI
Gilmore
Gilmore Summit
Cottonwood
BIRCH
Coal Kiln
Skelton Gulch
VALLEY
Indian Head Canyon
LEMHI CO.
BUTTE CO.
CLARK CO.
28
29
I-6
I-7
I-8
T-1
T-2
T-3
WS-1
WS-2
WS-3
R. 23 E.
R. 24 E.
R. 25 E.
R. 26 E.
R. 27 E.
R. 28 E.
R. 29 E.
R. 30 E.
T. 16 N.
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

RECREATION SITES - PROPOSED

I-8	Elevenmile
I-9	Camp Creek

▨ **LIMITED USE AREAS**

Restrictions on mineral & energy exploration & development

▨ SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

–·–·- Seasonal Restriction Boundary

▤ NO SURFACE OCCUPANCY

NO SURFACE OCCUPANCY WITHIN ¼ MILE OF STREAMS

▥ WITHDRAWN – CLOSED

☐ **MODERATE USE AREAS**

■ **TRANSFER AREAS**

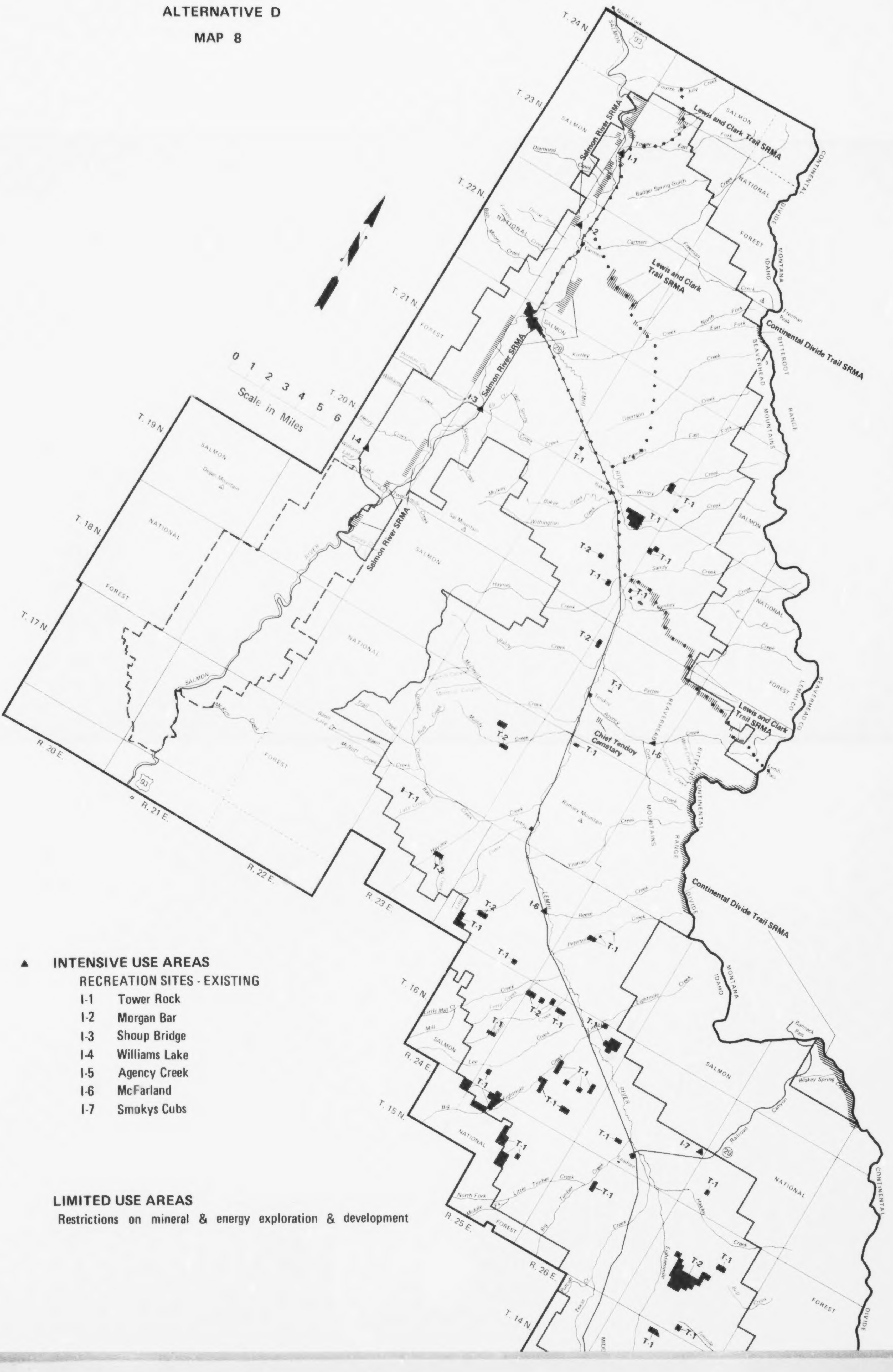
T-1	Sale or Exchange
T-2	Desert Land Entry
T-3	Exchange Only

. . . Lewis & Clark Trail

* During any given year, the authorized officer may waive seasonal restrictions if actual conditions do not warrant them.

ALTERNATIVE D

MAP 8



Lewis and Clark Trail SRMA
Salmon River SRMA
Continental Divide Trail SRMA
Chief Tendoy Cemetary
CONTINENTAL DIVIDE
MONTANA
IDAHO
BEAVERHEAD MOUNTAINS
BITTERROOT RANGE
BEAVERHEAD CO.
LEMHI CO.
SALMON NATIONAL FOREST
SALMON RIVER
LEMHI RIVER
I-1
I-2
I-3
I-4
I-5
I-6
I-7
T-1
T-2
93
28
T. 24 N.
T. 23 N.
T. 22 N.
T. 21 N.
T. 20 N.
T. 19 N.
T. 18 N.
T. 17 N.
T. 16 N.
T. 15 N.
T. 14 N.
R. 20 E.
R. 21 E.
R. 22 E.
R. 23 E.
R. 24 E.
R. 25 E.
R. 26 E.
0 1 2 3 4 5 6
Scale in Miles

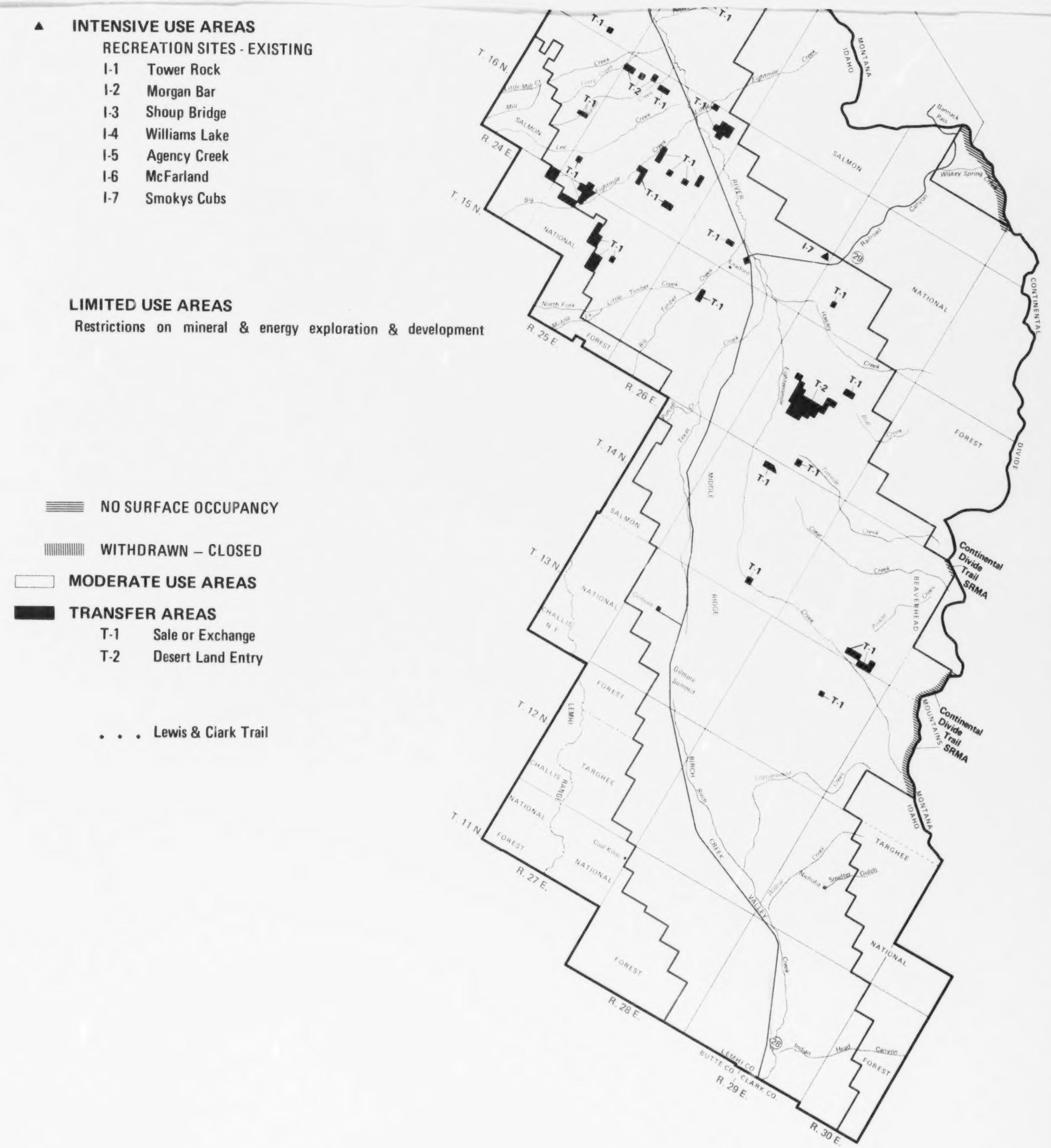
▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

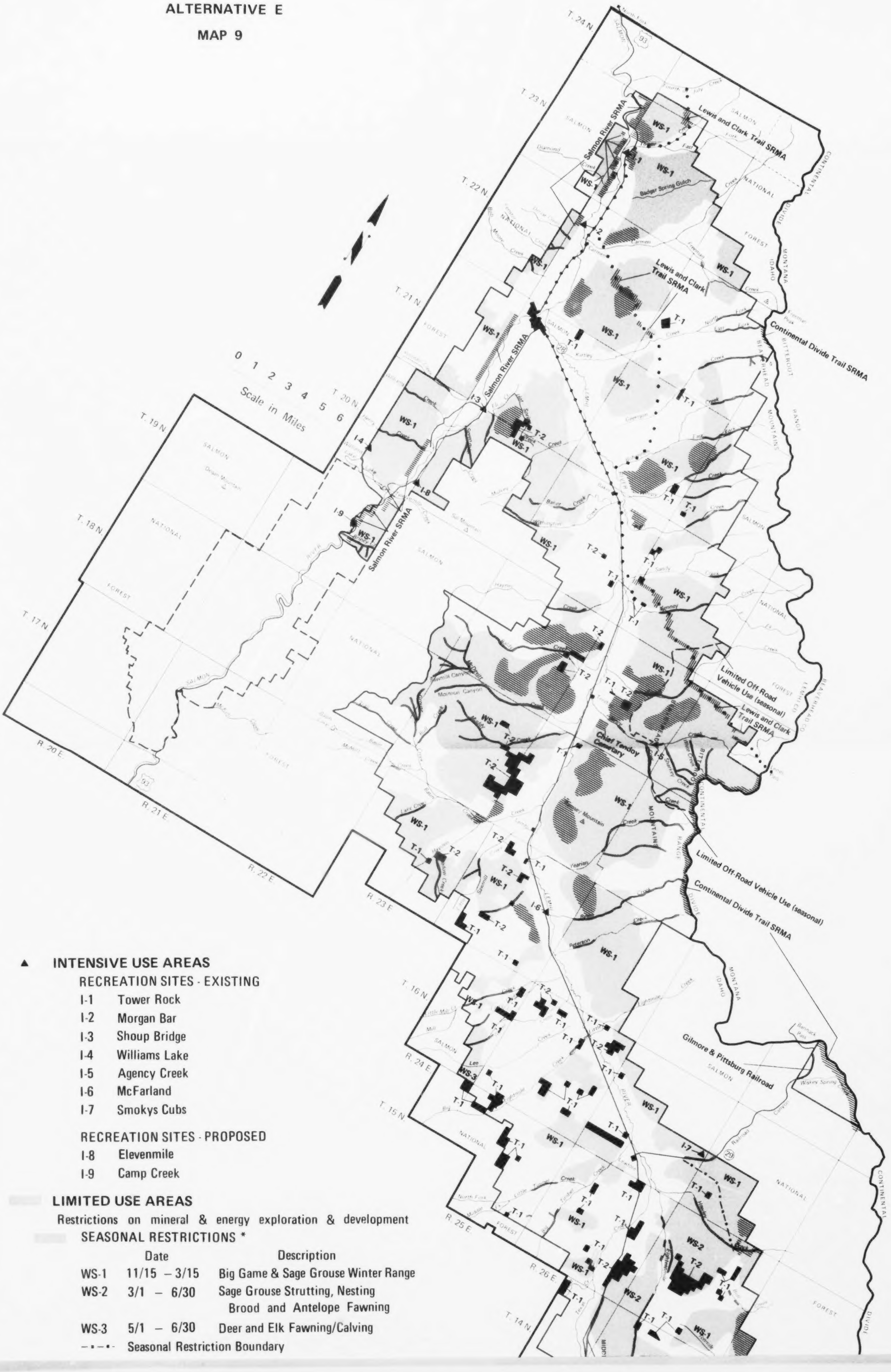
LIMITED USE AREAS

Restrictions on mineral & energy exploration & development


▲ INTENSIVE USE AREAS
RECREATION SITES - EXISTING
I-1 Tower Rock
I-2 Morgan Bar
I-3 Shoup Bridge
I-4 Williams Lake
I-5 Agency Creek
I-6 McFarland
I-7 Smokys Cubs
LIMITED USE AREAS
Restrictions on mineral & energy exploration & development
NO SURFACE OCCUPANCY
WITHDRAWN – CLOSED
MODERATE USE AREAS
TRANSFER AREAS
T-1 Sale or Exchange
T-2 Desert Land Entry
. . . Lewis & Clark Trail
MONTANA
IDAHO
CONTINENTAL
DIVIDE
Continental Divide Trail SRMA
Continental Divide Trail SRMA
BEAVERHEAD
MOUNTAINS
SALMON
NATIONAL
FOREST
RIVER
MIDDLE
RIDGE
BIRCH
CREEK
VALLEY
LEMHI
RANGE
TARGHEE
CHALLIS N.F.
Gilmore Summit
Bannack Pass
Wiskey Spring
Hawley
Eighteenmile
Little Timber
North Fork
Texas
Coal Kiln
Nicholia
Smelter Gulch
Indian Head Canyon
Creek
Big
Lee
Mill
T-1
T-2
I-7
29
28
T. 16 N.
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.
R. 24 E.
R. 25 E.
R. 26 E.
R. 27 E.
R. 28 E.
R. 29 E.
R. 30 E.
LEMHI CO.
BUTTE CO.
CLARK CO.

ALTERNATIVE E

MAP 9



0 1 2 3 4 5 6
Scale in Miles
Lewis and Clark Trail SRMA
Salmon River SRMA
Continental Divide Trail SRMA
Limited Off-Road Vehicle Use (seasonal)
Chief Tendoy Cemetery
Gilmore & Pittsburg Railroad
Badger Spring Gulch
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
SALMON NATIONAL FOREST
SALMON RIVER
LEMHI RIVER
WS-1
WS-2
WS-3
T-1
T-2
I-1
I-2
I-3
I-4
I-5
I-6
I-7
I-8
I-9
T. 24 N
T. 23 N
T. 22 N
T. 21 N
T. 20 N
T. 19 N
T. 18 N
T. 17 N
T. 16 N
T. 15 N
T. 14 N
R. 20 E
R. 21 E
R. 22 E
R. 23 E
R. 24 E
R. 25 E
R. 26 E
93
28

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

- I-1 Tower Rock
- I-2 Morgan Bar
- I-3 Shoup Bridge
- I-4 Williams Lake
- I-5 Agency Creek
- I-6 McFarland
- I-7 Smokys Cubs

RECREATION SITES - PROPOSED

- I-8 Elevenmile
- I-9 Camp Creek

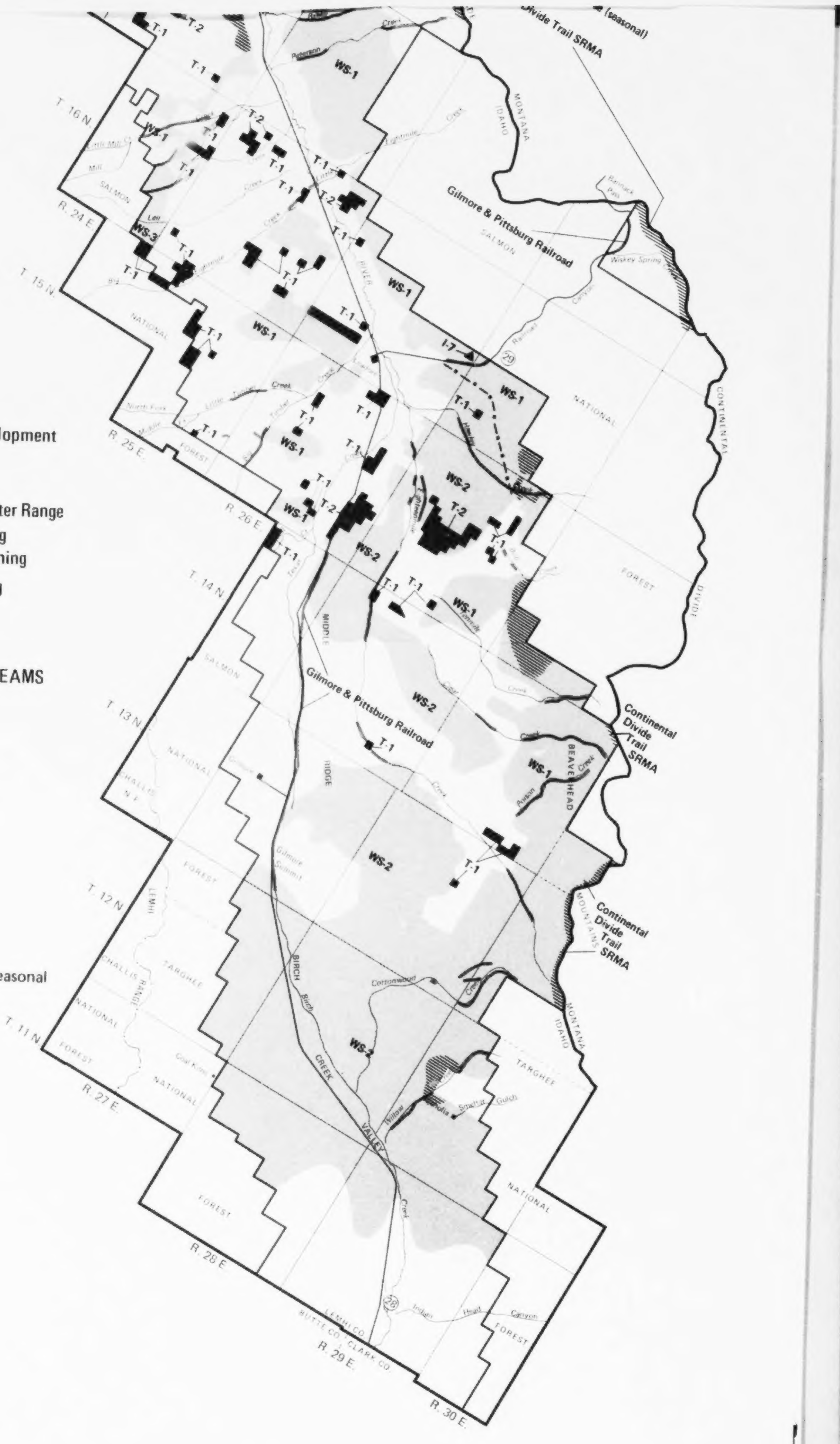
░ **LIMITED USE AREAS**

Restrictions on mineral & energy exploration & development

▒ SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

–·–·– Seasonal Restriction Boundary



(seasonal)
Divide Trail SRMA
MONTANA
IDAHO
Gilmore & Pittsburg Railroad
SALMON
RIVER
NATIONAL
FOREST
CONTINENTAL
DIVIDE
Continental Divide Trail SRMA
BEAVERHEAD
MOUNTAINS
Continental Divide Trail SRMA
MONTANA
IDAHO
TARGHEE
NATIONAL
FOREST
MIDDLE
RIDGE
BIRCH
CREEK
VALLEY
Gilmore Summit
LEMHI
CHALLIS N.F.
CHALLIS RANGE
NATIONAL
FOREST
LEMHI CO.
BUTTE CO.
CLARK CO.
WS-1
WS-2
WS-3
T-1
T-2
I-7
29
28
T. 16 N
T. 15 N
T. 14 N
T. 13 N
T. 12 N
T. 11 N
R. 24 E.
R. 25 E.
R. 26 E.
R. 27 E.
R. 28 E.
R. 29 E.
R. 30 E.

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

- I-1 Tower Rock
- I-2 Morgan Bar
- I-3 Shoup Bridge
- I-4 Williams Lake
- I-5 Agency Creek
- I-6 McFarland
- I-7 Smokys Cubs

RECREATION SITES - PROPOSED

- I-8 Elevenmile
- I-9 Camp Creek

LIMITED USE AREAS

Restrictions on mineral & energy exploration & development

SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving
–·–·–		Seasonal Restriction Boundary

▤ NO SURFACE OCCUPANCY

NO SURFACE OCCUPANCY WITHIN ¼ MILE OF STREAMS

▥ WITHDRAWN – CLOSED

☐ **MODERATE USE AREAS**

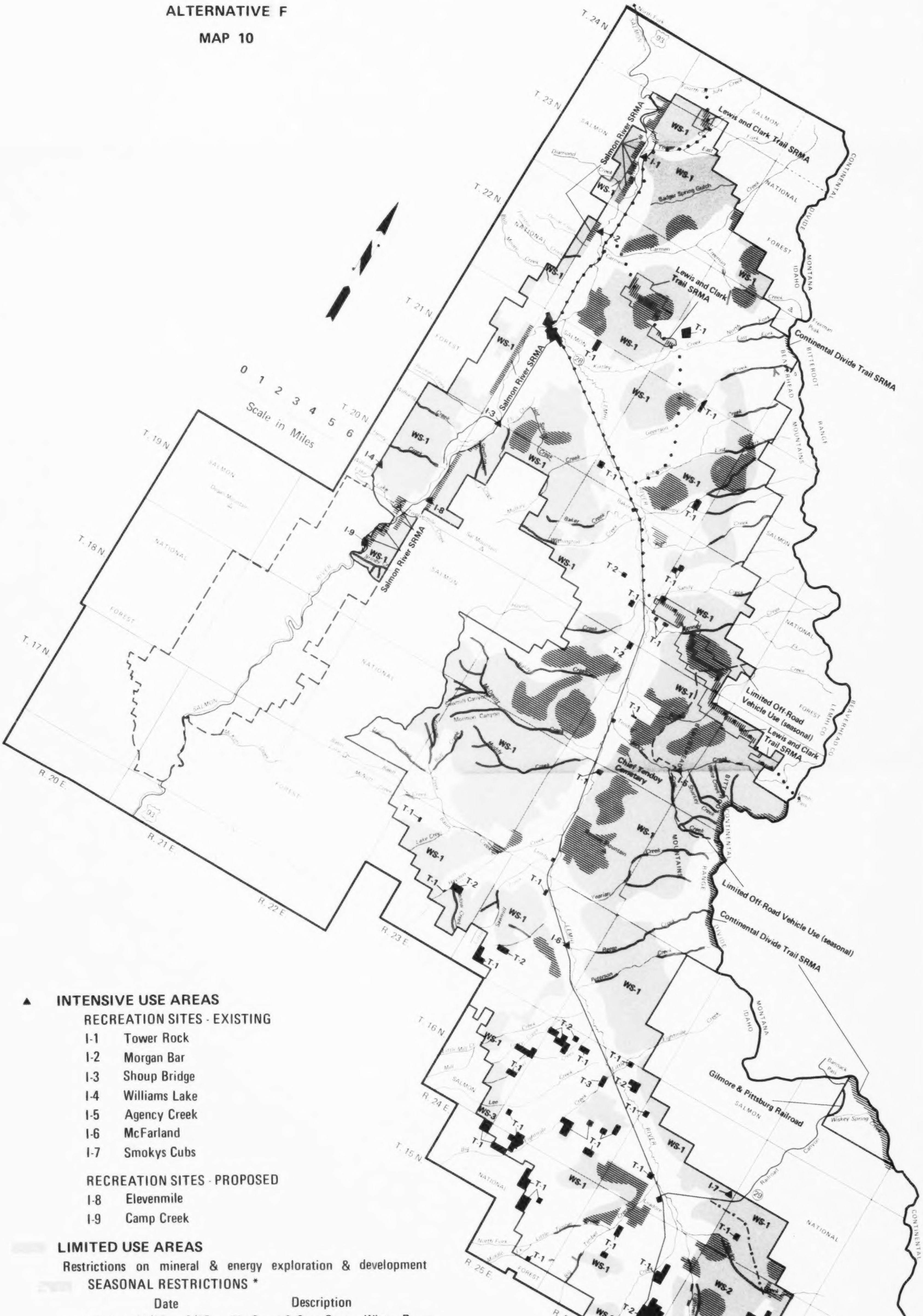
■ **TRANSFER AREAS**

- T-1 Sale or Exchange
- T-2 Desert Land Entry

• • • Lewis & Clark Trail

* During any given year, the authorized officer may waive seasonal restrictions if actual conditions do not warrant them.

ALTERNATIVE F
MAP 10


Lewis and Clark Trail SRMA
Salmon River SRMA
Continental Divide Trail SRMA
Limited Off-Road Vehicle Use (seasonal)
Limited Off-Road Vehicle Use (seasonal)
Continental Divide Trail SRMA
Gilmore & Pittsburg Railroad
Chief Tendoy Cemetery
Badger Spring Gulch
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
SALMON NATIONAL FOREST
LEMHI RIVER
SALMON RIVER
BEAVERHEAD CO.
LEMHI CO.
T. 24 N
T. 23 N
T. 22 N
T. 21 N
T. 20 N
T. 19 N
T. 18 N
T. 17 N
T. 16 N
T. 15 N
T. 14 N
R. 20 E
R. 21 E
R. 22 E
R. 23 E
R. 24 E
R. 25 E
R. 26 E
0 1 2 3 4 5 6
Scale in Miles
WS-1
WS-2
WS-3
T-1
T-2
T-3
I-1
I-2
I-3
I-4
I-5
I-6
I-7
I-8
I-9

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

RECREATION SITES - PROPOSED

I-8	Elevenmile
I-9	Camp Creek

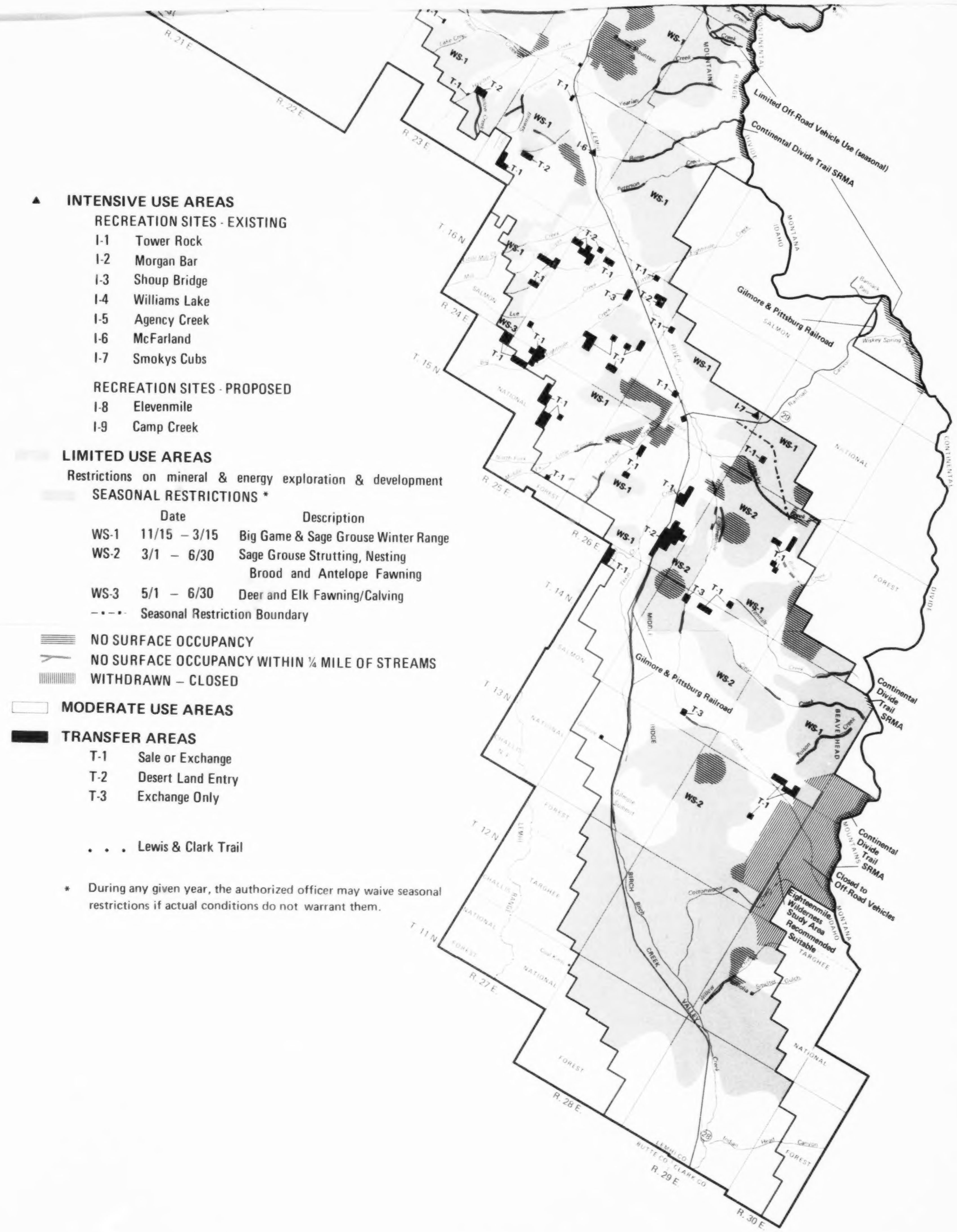
LIMITED USE AREAS

Restrictions on mineral & energy exploration & development

SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

–·–·– Seasonal Restriction Boundary



Limited Off-Road Vehicle Use (seasonal)
Continental Divide Trail SRMA
Gilmore & Pittsburg Railroad
Continental Divide Trail SRMA
Continental Divide Trail SRMA
Closed to Off-Road Vehicles
Eighteenmile Wilderness Study Area Recommended Suitable
CONTINENTAL DIVIDE
MONTANA
IDAHO
BEAVERHEAD
NATIONAL FOREST
SALMON NATIONAL FOREST
CHALLIS N.F.
TARGHEE NATIONAL FOREST
LEMHI RANGE
MIDDLE RIDGE
BIRCH CREEK VALLEY
LEMHI CO.
BUTTE CO.
CLARK CO.
R. 21 E.
R. 22 E.
R. 23 E.
R. 24 E.
R. 25 E.
R. 26 E.
R. 27 E.
R. 28 E.
R. 29 E.
R. 30 E.
T. 16 N.
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.
WS-1
WS-2
WS-3
T-1
T-2
T-3
I-6
I-7
28

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

RECREATION SITES - PROPOSED

I-8	Elevenmile
I-9	Camp Creek

LIMITED USE AREAS

Restrictions on mineral & energy exploration & development

SEASONAL RESTRICTIONS *

	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

–·–· Seasonal Restriction Boundary

▤ NO SURFACE OCCUPANCY

NO SURFACE OCCUPANCY WITHIN ¼ MILE OF STREAMS

▥ WITHDRAWN – CLOSED

☐ **MODERATE USE AREAS**

■ **TRANSFER AREAS**

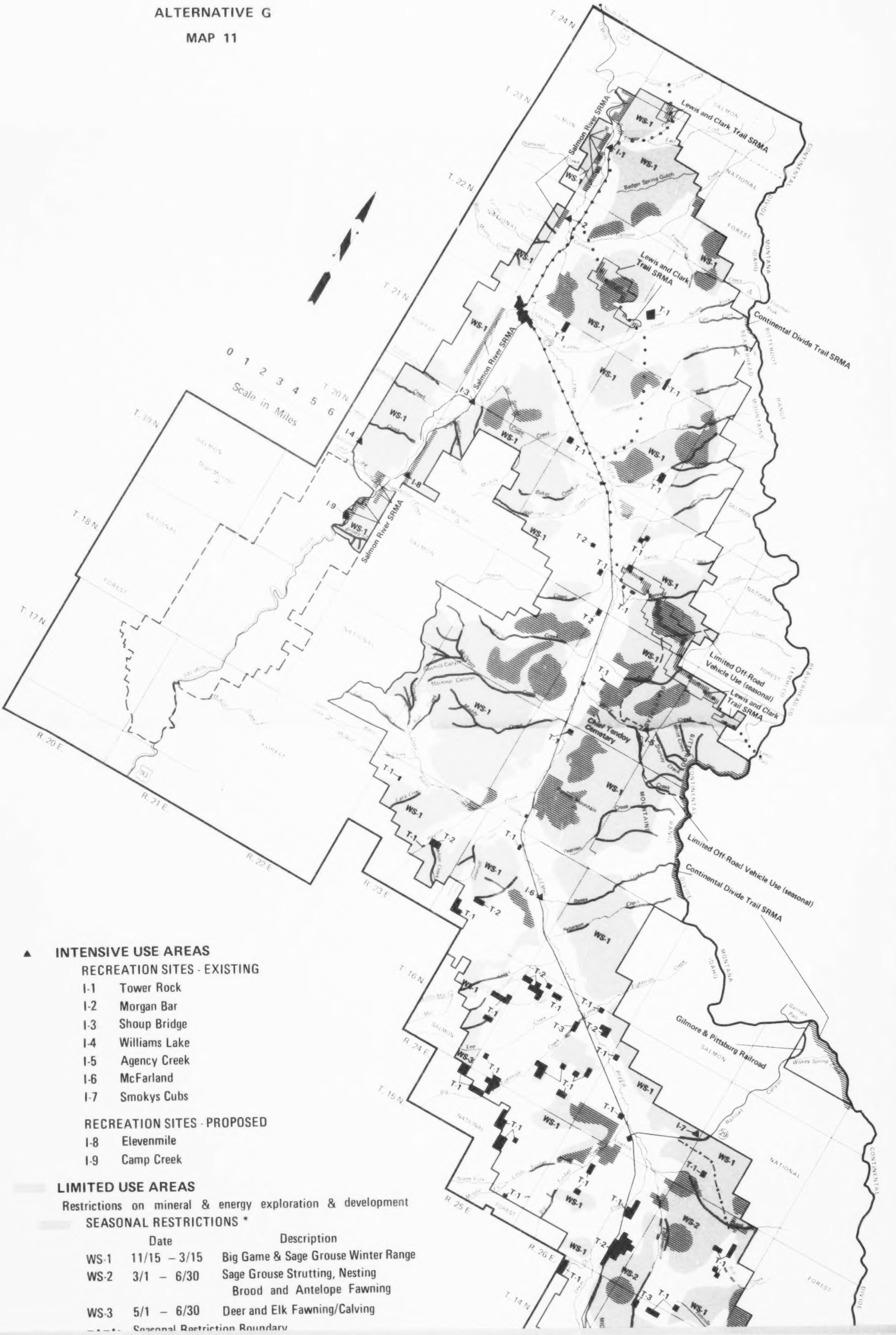
T-1	Sale or Exchange
T-2	Desert Land Entry
T-3	Exchange Only

. . . Lewis & Clark Trail

* During any given year, the authorized officer may waive seasonal restrictions if actual conditions do not warrant them.

ALTERNATIVE G

MAP 11


0 1 2 3 4 5 6
Scale in Miles
T. 24 N
T. 23 N
T. 22 N
T. 21 N
T. 20 N
T. 19 N
T. 18 N
T. 17 N
T. 16 N
T. 15 N
T. 14 N
R. 20 E
R. 21 E
R. 22 E
R. 23 E
R. 24 E
R. 25 E
R. 26 E
Lewis and Clark Trail SRMA
Salmon River SRMA
Continental Divide Trail SRMA
Limited Off-Road Vehicle Use (seasonal)
Chief Tendoy Cemetary
Gilmore & Pittsburg Railroad
Badger Spring Gulch
CONTINENTAL DIVIDE
MONTANA
IDAHO
BITTERROOT RANGE
BEAVERHEAD MOUNTAINS
SALMON NATIONAL FOREST
WS-1
WS-2
WS-3
T-1
T-2
T-3
I-1
I-2
I-3
I-4
I-5
I-6
I-7
I-8
I-9

▲ **INTENSIVE USE AREAS**

RECREATION SITES - EXISTING

I-1	Tower Rock
I-2	Morgan Bar
I-3	Shoup Bridge
I-4	Williams Lake
I-5	Agency Creek
I-6	McFarland
I-7	Smokys Cubs

RECREATION SITES - PROPOSED

I-8	Elevenmile
I-9	Camp Creek

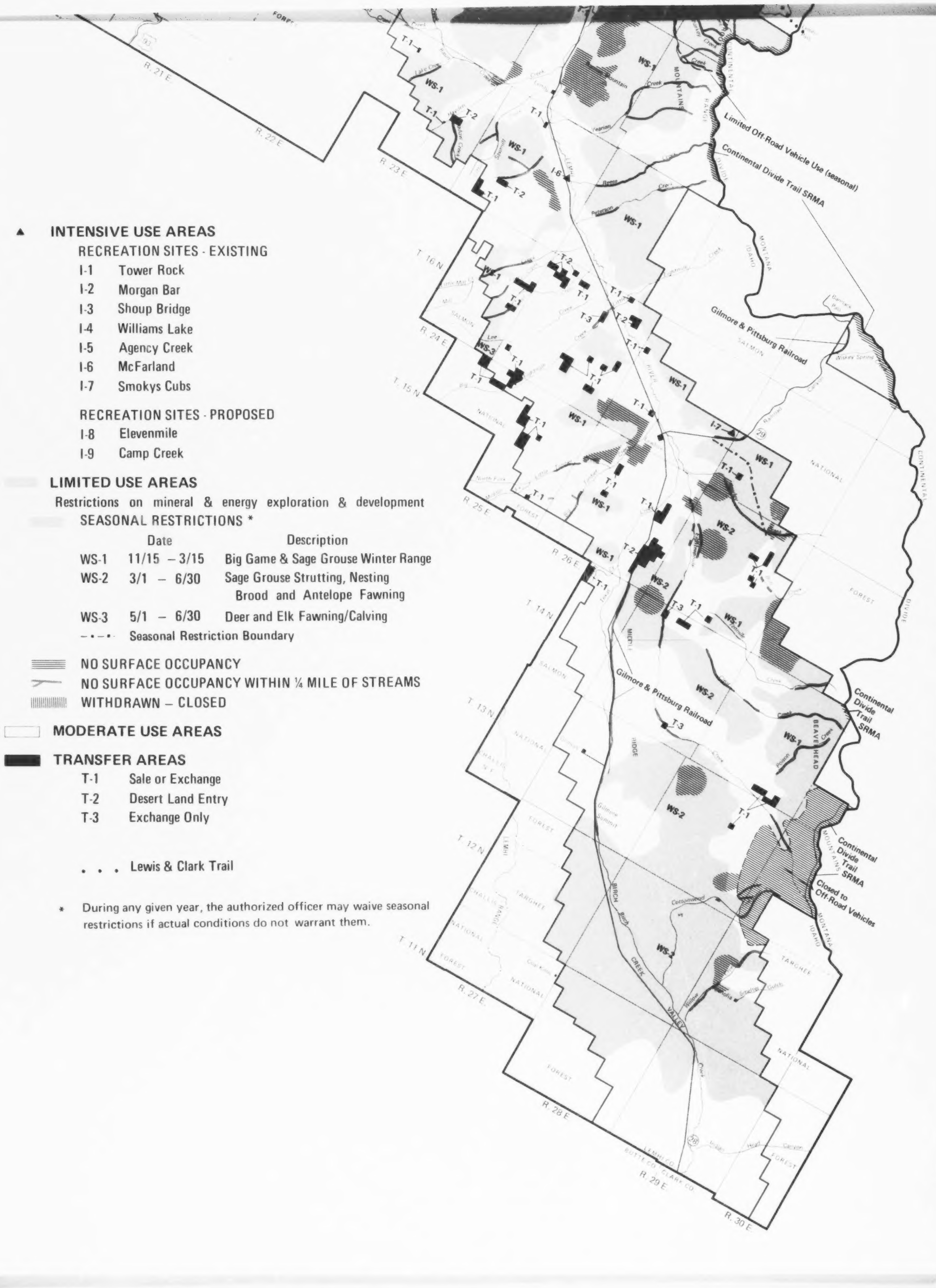
LIMITED USE AREAS

Restrictions on mineral & energy exploration & development

SEASONAL RESTRICTIONS *

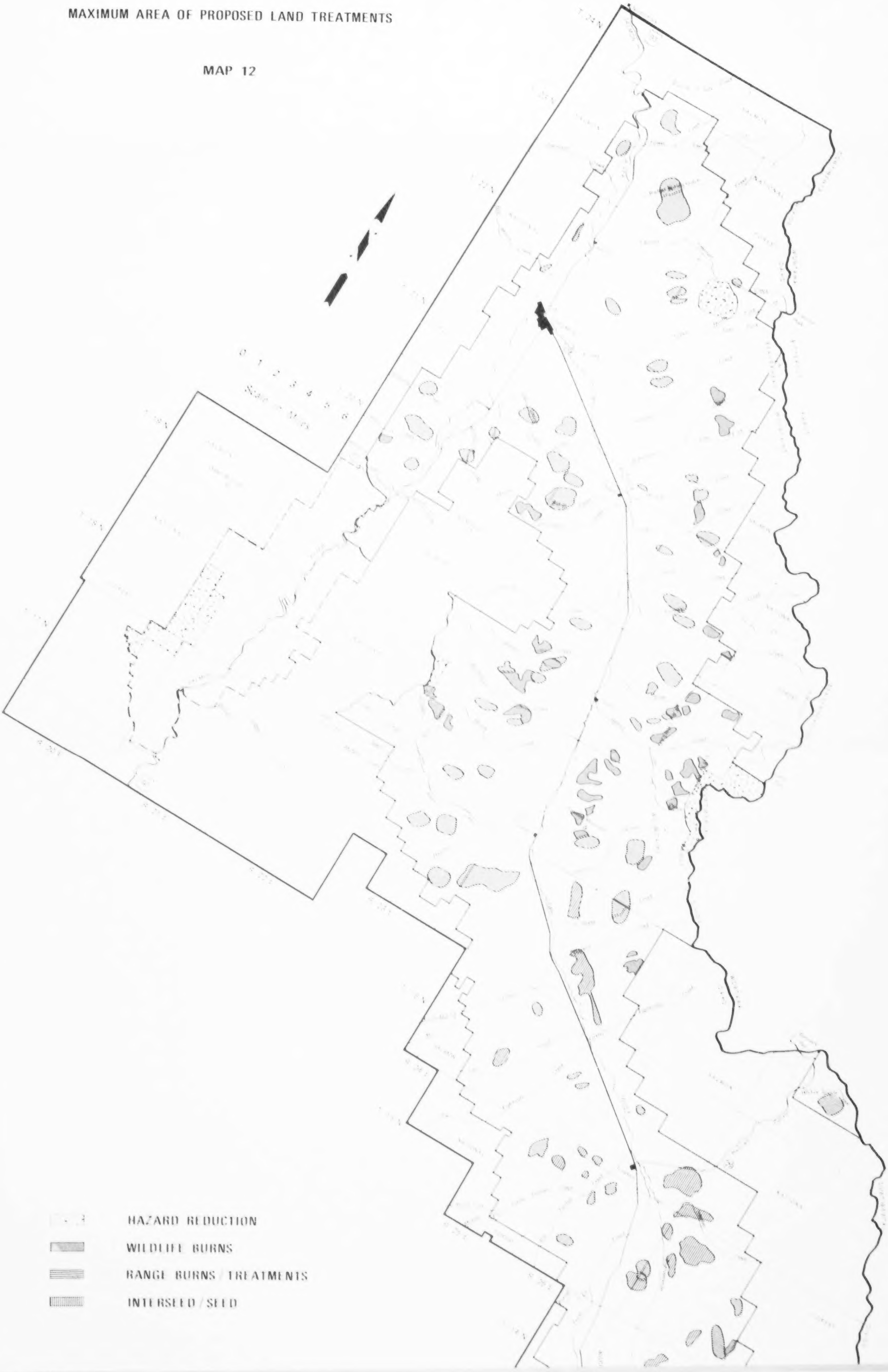
	Date	Description
WS-1	11/15 – 3/15	Big Game & Sage Grouse Winter Range
WS-2	3/1 – 6/30	Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3	5/1 – 6/30	Deer and Elk Fawning/Calving

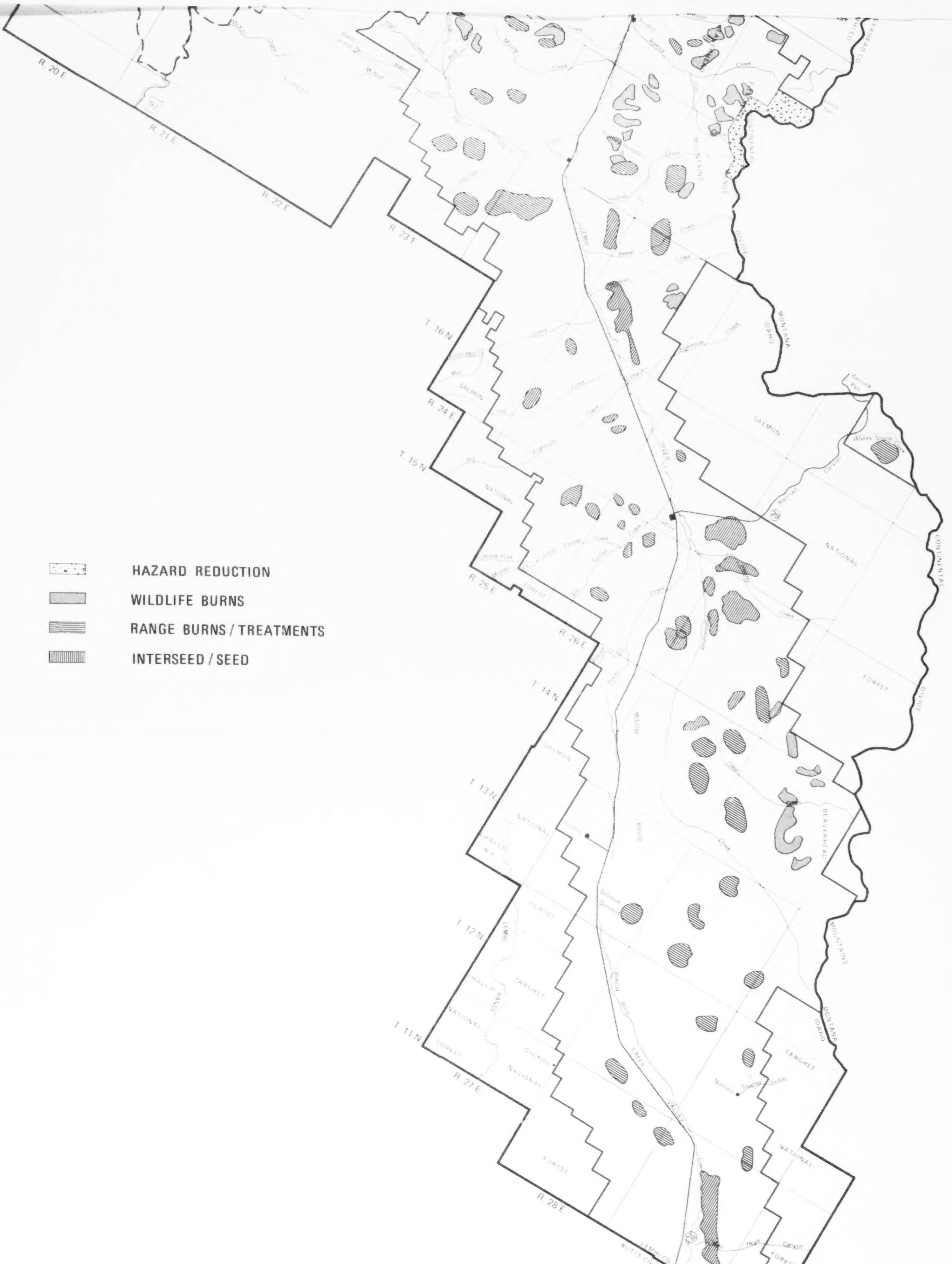
Seasonal Restriction Boundary

INTENSIVE USE AREAS
RECREATION SITES - EXISTING
I-1 Tower Rock
I-2 Morgan Bar
I-3 Shoup Bridge
I-4 Williams Lake
I-5 Agency Creek
I-6 McFarland
I-7 Smokys Cubs
RECREATION SITES - PROPOSED
I-8 Elevenmile
I-9 Camp Creek
LIMITED USE AREAS
Restrictions on mineral & energy exploration & development
SEASONAL RESTRICTIONS *
Date
Description
WS-1 11/15 – 3/15 Big Game & Sage Grouse Winter Range
WS-2 3/1 – 6/30 Sage Grouse Strutting, Nesting Brood and Antelope Fawning
WS-3 5/1 – 6/30 Deer and Elk Fawning/Calving
Seasonal Restriction Boundary
NO SURFACE OCCUPANCY
NO SURFACE OCCUPANCY WITHIN ¼ MILE OF STREAMS
WITHDRAWN – CLOSED
MODERATE USE AREAS
TRANSFER AREAS
T-1 Sale or Exchange
T-2 Desert Land Entry
T-3 Exchange Only
Lewis & Clark Trail
* During any given year, the authorized officer may waive seasonal restrictions if actual conditions do not warrant them.
Limited Off-Road Vehicle Use (seasonal)
Continental Divide Trail SRMA
Gilmore & Pittsburg Railroad
Continental Divide Trail SRMA
Closed to Off-Road Vehicles
CONTINENTAL DIVIDE
MONTANA
IDAHO
BEAVERHEAD MOUNTAINS
NATIONAL FOREST
SALMON
LEMHI
BIRCH CREEK VALLEY
TARGHEE
R. 21 E.
R. 22 E.
R. 23 E.
R. 24 E.
R. 25 E.
R. 26 E.
R. 27 E.
R. 28 E.
R. 29 E.
R. 30 E.
T. 16 N.
T. 15 N.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.
WS-1
WS-2
WS-3
T-1
T-2
T-3
I-6
I-7
93
28
29

MAXIMUM AREA OF PROPOSED LAND TREATMENTS

MAP 12


0 1 2 3 4 5 6
Statute Miles
HAZARD REDUCTION
WILDLIFE BURNS
RANGE BURNS / TREATMENTS
INTERSEED / SEED



HAZARD REDUCTION
WILDLIFE BURNS
RANGE BURNS / TREATMENTS
INTERSEED / SEED
CONTINENTAL
DIVIDE
MONTANA
IDAHO
BEAVERHEAD
MOUNTAINS
SALMON
NATIONAL
FOREST
TARGHEE
LEMHI
RIVER
MIDDLE
RIDGE
BIRCH
CREEK
VALLEY
CHALLIS
LEMHI RANGE
T. 16 N
T. 15 N
T. 14 N
T. 13 N
T. 12 N
T. 11 N
R. 20 E
R. 21 E
R. 22 E
R. 23 E
R. 24 E
R. 25 E
R. 26 E
R. 27 E
R. 28 E
R. 29 E
R. 30 E
LEMHI CO.
BUTTE CO. CLARK CO.
28
29
93